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SUPERFUND TECHNICAL ASSESSMENT AND RESPONSE TEAM EPA CONTRACT 68-W5-0009

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Mr. Charles Schwer Vermont Agency of Natural Resources Department of Environmental Conservation Hazardous Materials Management Division 103 South Main Street/West Building Waterbury, Vermont 05671-0404

Subject:

Final Site Inspection Report

#T10113

West Burke Auto Body

Burke, Vermont

CERCLIS No. VTD982748410

TDD No. 99-05-0005

Dear Mr. Schwer:

Enclosed is one copy of the Final Site Inspection (SI) Report for the West Burke Auto Body property in Burke, Vermont. The U.S. Environmental Protection Agency Region I (EPA Region I), Office of Site Remediation and Restoration comments regarding the contents of the Draft SI Report have been incorporated. Attachments have been omitted from this final deliverable as no comments or changes to the attachments were requested during the review process.

Please contact the undersigned at (781) 229-6430 if you have any questions regarding this report.

Very truly yours,

ROY F. WESTON, INC.

Region I START

Eric Brochu Site Leader

Jocelyn Boesch

Project Leader

EB:eb Enclosure

cc: G. Millan-Ramos (EPA Site Assessment Task Monitor)

#### FINAL SITE INSPECTION REPORT FOR WEST BURKE AUTO BODY BURKE, VERMONT

CONTRACT NO. 68-W5-0009

CERCLIS NO. VTD982748410 TDD NO. 99-05-0005 PCS NO. 7212 DC NO. A-3608

#### Prepared by:

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24 February 2000

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OA Review	1/14/00 Date	

#### DISCLAIMER

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#### TABLE OF CONTENTS

<u> Title</u>	<u>Page</u>
INTRODUCTION	
SITE DESCRIPTION	
OPERATIONAL ANI CHARACTERISTICS	REGULATORY HISTORY AND WASTE
WASTE/SOURCE SA	MPLING 9
GROUNDWATER PA	<b>ATHWAY</b> 13
SURFACE WATER I	PATHWAY 16
SOIL EXPOSURE PA	<b>ATHWAY</b> 25
AIR PATHWAY	
SUMMARY	
REFERENCES	
ATTACHMENT A -	WEST BURKE AUTO BODY SOURCE/SOIL SAMPLES START Samples collected 24 and 25 November 1997
ATTACHMENT B -	WEST BURKE AUTO BODY SURFACE WATER/DRINKING WATER SAMPLES START Samples collected 24 and 25 November 1997
ATTACHMENT C -	WEST BURKE AUTO BODY SEDIMENT SAMPLES START Samples collected 24 and 25 November 1997

#### LIST OF FIGURES

Figure No.	<u>Title</u>	<u>Page</u>
1	Location Map	2
2	Site Sketch	3
3	Surface Water Pathway Sketch	17
	LIST OF TABLES	
<u>Table No.</u>	<u>Title</u>	<u>Page</u>
1	Source Evaluation for West Burke Auto Body	7
2	Hazardous Waste Quantity for West Burke Auto Body	8
3	Sample Summary: West Burke Auto Body Waste/Source Samples Collected by START on 24 and 25 November 199	7 9
4	Summary of Analytical Results, Waste/Source Sample Analysis for West Burke Auto Body 24 and 25 November 1997	11
5	Public Groundwater Supply Sources Within 4-Radial Miles of West Burke Auto Body	14
6	Estimated Drinking Water Populations Served by Groundwater Sources Within 4-Radial Miles of West Burke Auto Body	14
7	Sample Summary: West Burke Auto Body Drinking Water Samples Collected by START on 24 and 25 November 199	97 15
8	Summary of Analytical Results, Drinking Water Sample Analysis for West Burke Auto Body 24 and 25 November 1997	16
9	Surface Water Bodies Along the 15-Mile Downstream Pathway from We Burke Auto Body	st 18
10	Sensitive Environments Along the 15-Mile Downstream Pathway from West Burke Auto Body	19

### LIST OF TABLES (Concluded)

Table No.	<u>Title</u>	<u>Page</u>
11	Sample Summary: West Burke Auto Body Surface Water/Sedimen Collected by START on 24 and 25 November 1997	t Samples
12	Summary of Analytical Results, Surface Water/Sediment Sample for West Burke Auto Body on 24 and 25 November 1997	Analysis 22
13	Estimated Population Within 4-Radial Miles of West Burke Auto	3ody 26
14	Sensitive Environments Located Within 4-Radial Miles	27

Final Site Inspection Report West Burke Auto Body Burke, Vermont CERCLIS No. VTD982748410 TDD No. 99-05-0005 Work Order No. 20098-041-001-7212-50

#### INTRODUCTION

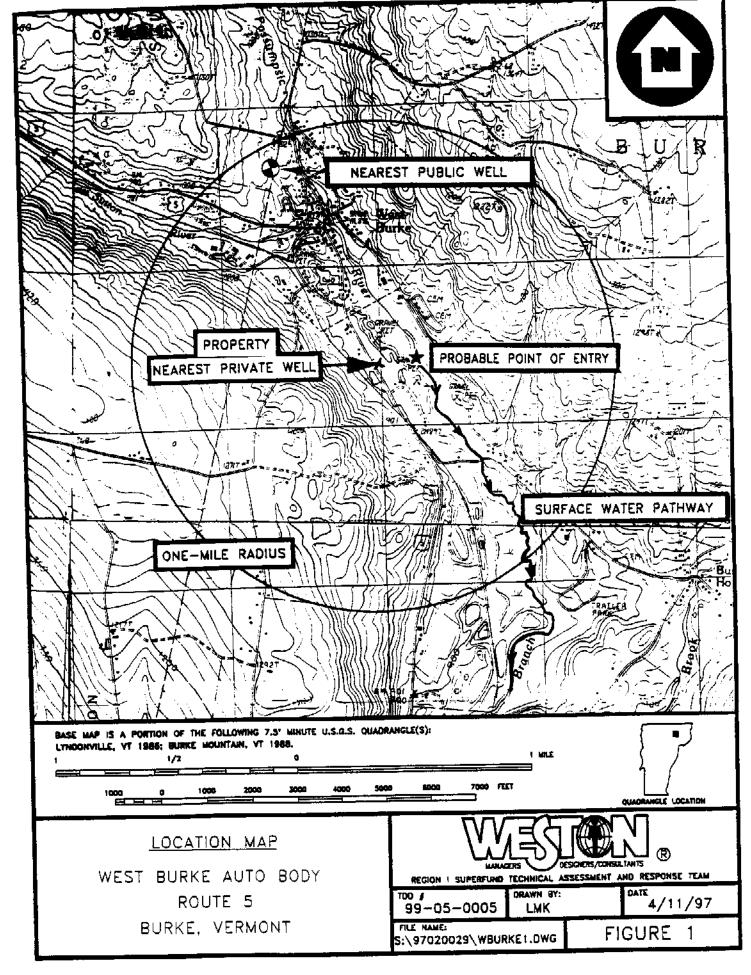
The Roy F. Weston, Inc. (WESTON®) Superfund Technical Assessment and Response Team (START) was requested by the U.S. Environmental Protection Agency Region I (EPA Region I), Office of Site Remediation and Restoration to perform a Site Inspection (SI) of the West Burke Auto Body property at Route 5 in Burke, Vermont. Tasks were conducted in accordance with the SI scope of work and technical specifications provided by EPA Region I. A Preliminary Assessment (PA) report for the West Burke Auto Body property was prepared by the Vermont Agency of Natural Resources (VT ANR) on 17 January 1989. The PA described the disposal of an unknown quantity of waste oil, paint and lacquer thinners, lacquer, and waste paint onto the ground surface. Soil samples collected from the property by the Vermont Department of Environmental Conservation (VT DEC) documented the presence of volatile organic compounds (VOCs) in the soil. On the basis of the information provided in the PA report, the West Burke Auto Body SI was initiated.

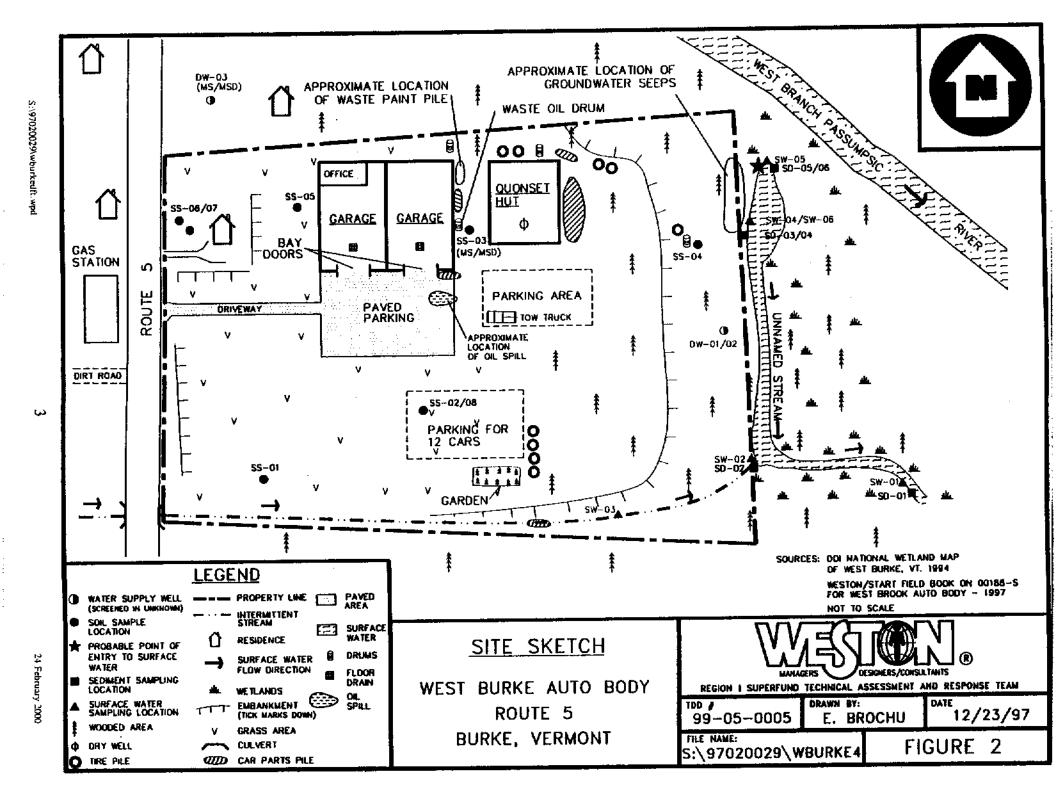
Background information used in the generation of this report was obtained through file searches conducted at the EPA Region I and VT DEC, telephone interviews with town officials, conversations with persons knowledgeable of the West Burke Auto Body property, and conversations with other Federal, State, and local agencies.

This package follows the guidelines developed under the Comprehensive Environmental Response, Compensation, and Liability Act of 1980 (CERCLA), as amended, commonly referred to as Superfund. However, these documents do not necessarily fulfill the requirements of other EPA Region I regulations such as those under the Resource Conservation and Recovery Act (RCRA) or other Federal, State, or local regulations. SIs are intended to provide a preliminary screening of sites to facilitate EPA Region I's assignment of site priorities. They are limited efforts and are not intended to supersede more detailed investigations.

#### SITE DESCRIPTION

The West Burke Auto Body (WBAB) property is located along Route 5, Burke, Caledonia County, Vermont at latitude 44° 38′ 08.5" north and longitude 71° 58′ 36.0" west (Figure 1) [1, p. 1]. Mr. Ray McCoy, owner of the property since 1965, operates a commercial automotive body shop on the property [2]. The Town of Burke Tax Assessor identifies the 0.5-acre property as Map No. 3, Parcel No. 03-04-020 [3]. The WBAB property is bordered to the west by an Irving gasoline station and a residential unit across Route 5, to the north by a residential unit on a wooded plot, to the east by emergent, scrub-shrub and forested wetlands of West Branch Passumpsic River, and an unnamed stream, and to the south by an unnamed intermittent stream and woodland. There are three buildings on the WBAB property, including an on-site residence, the WBAB garage, and a corrugated metal Quonset hut (Figure 2) [3]. No fence or security system restricts access to the property [3, p. 8].





### OPERATIONAL AND REGULATORY HISTORY AND WASTE CHARACTERISTICS

Prior to 1965, the WBAB property was a private residence and was owned by Ms. Leela Davis. On 30 April 1965, Mr. McCoy purchased the property from Ms. Davis and built a two-bay garage to be used as a commercial automotive body shop [1, p. 2]. From 1965 to 1983, WBAB repaired 300 to 400 automobiles per year [4]. In November 1987, Mr. McCoy leased half of the garage to Mr. Leon Turmel. Mr. Turmel used the space to operate T-N-T Enterprises, an automobile repair business [4]. Mr. Turmel relocated his business in July 1989 [1, p. 2]. Operations at WBAB currently consist of buying automobiles at auctions and reselling them. Mr. McCoy also builds kit automobiles and stores them on the property. Since 1983, limited automobile body work has been performed on the property [6].

On 15 July 1988, a hazardous waste generator status inspection of the WBAB property was conducted by the Vermont Agency of Natural Resources (VT ANR). Subsequently, the WBAB property was listed on the United States Environmental Protection Agency (EPA) Resource Conservation and Recovery Information System (RCRIS) database as a small quantity generator [7]. During the inspection, it was noted that waste paint and thinner materials had been dumped outside of an east facing garage window and onto the ground surface. START was unable to obtain any information regarding which garage window was used. Residual material in the area had built up to a thickness of approximately 3 inches [1]. During the inspection, VT ANR discovered that Mr. McCoy was attempting to sell half of the WBAB garage to Mr. Turmel of T-N-T Enterprises. However, Mr. Turmel could not receive a bank loan until the property was "declared clean" [6, p. 2].

In 1988, an unspecified volume of contaminated soil was excavated from below the garage window by an unknown local contractor [4].

On 22 July 1988, VT ANR returned to the property to perform field screening of an excavated area and its associated soils (excavated in connection with the pending property transfer to Mr. Turmel). VT ANR performed air monitoring using a photoionization detector (PID) at the WBAB property. PID readings at an unspecified area of the property ranged from 15 to 40 units above background concentrations [5].

On 3 August 1988, VT ANR conducted a limited soil gas survey using a PID. Volatile organic compounds (VOCs) were detected in the soil at concentrations ranging from 10 to 500 units above background concentrations, with the highest readings recorded at the waste paint/lacquer thinner disposal area located below the aforementioned garage window [9]. Information regarding sampling results or locations of samples was not available in the VT ANR files. VT ANR sampled the on-site drinking water well since it is directly downgradient of the waste paint/lacquer thinner disposal area. The drinking water sample was analyzed for VOCs using an unspecified method. The only available information regarding the groundwater sample is that no VOCs were detected above the sample detection limits [8]. There is no information in the Vermont State files detailing the sample detection limits of the groundwater samples.

Soil samples were collected on 22 July 1988, 3 August 1988, and 12 September 1988 by VT ANR, from the vicinity of the soil excavation area, located below the garage window. These samples documented the presence of VOCs including acetone, 2-butanone, methylene chloride, and toluene [1, p. 4]. Concentrations of the compounds detected, information regarding sampling depths, and analytical methods were not available in the Vermont State files [1, p. 4].

An unspecified number of soil samples were again collected from the area below the garage window by VT ANR on 9 December 1988. Sample analysis indicated the presence of methylene chloride, toluene, 2-butanone, and acetone [1, p. 4; 10]. Information regarding soil sample locations, depths, concentrations of compounds detected, and analytical methods used were not available in the Vermont State files.

On 17 January 1989, VT ANR conducted a Preliminary Assessment (PA) of the WBAB property [1, p. 4]. The PA noted that waste paint, lacquer, paint thinner, and lacquer thinner were disposed of directly to the ground surface by dumping them through the previously mentioned garage window. At the time of the PA, wastes generated at the property included Speedy-Dri (used to clean up spills), batteries (sold to a Canadian business in Roch Island, Quebec), and scrap automobile parts. The PA also noted that waste oil had been disposed of to the ground surface outside of the garage bay door. According to Mr. McCoy, the oil had been spilled when he was helping a friend pull out an automobile engine [1, p. 4]. The PA noted that automobile batteries were a potential source of contamination; however, no analytical evidence has been collected to confirm the presence of sulfuric acid contamination [1, p. 4].

The PA also indicated that there were piles of scrap automobile parts and possibly buried automobile parts to the east of the garage, near the West Branch Passumpsic River [1, p. 4]. The PA also noted that a dry well located beneath the Quonset hut was used to dispose of wastes, including paints, paint solvents, and waste oil. Currently, there is no information regarding the length of time wastes were disposed of into the dry well. Floor drains are located in each of the garage bays. The drains, which were covered at the time of the PA, are connected directly to the dry well underneath the Quonset hut [5]. According to the PA, the dry well became clogged with paint material and failed [1, p. 4]. However, at the time of the Roy F. Weston, Inc. (WESTON®) Superfund Technical Assessment and Response Team (START) on-site reconnaissance on 6 June 1999, the floor drains were uncovered [3, p. 3-4].

Currently, there is no additional information detailing whether the drains, piping system, or the dry well became clogged; when it became clogged and failed; the amount of waste disposed of into the dry well; or what was used to cover the drains to the dry well at the time of the PA [1, p. 4].

A memorandum prepared by the VT ANR on 6 November 1989 described interviews with residents of Burke regarding the WBAB property. According to the VT ANR interviews, anonymous residents stated that Mr. McCoy buried automobile parts and aerosol cans less than 100 feet (ft) from the West Branch Passumpsic River [11].

On 6 June 1997, START conducted an on-site reconnaissance of the WBAB property [3]. A majority of the property was unpaved with the exception of one asphalt driveway and parking area [3, p. 5]. START observed approximately 27 automobiles parked on the unpaved areas of the property and automobile parts scattered throughout the property. Mr. McCoy stated that most of the automobiles on the property did not have batteries. The pile of scrap automobile parts near the well, as described by VT ANR in 1989, was not observed by START.

START personnel observed one floor drain in each of the two bays in the garage [3, p. 4]. According to Mr. McCoy, the drains are connected to a dry well located under the Quonset hut [5]. There were approximately 110 gallons of liquids in miscellaneous containers in the east bay of the garage, including two 25-gallon containers of waste-paints which were reportedly later disposed of by Safety-Kleen on an unknown date; two 25-gallon containers (unlabeled and partially full of an unknown liquid); unlabeled, miscellaneous containers with a total volume of approximately 10 gallons; five aerosol cans of paint; three aerosol cans of cleaner; an oxygen cylinder; and an acetylene cylinder [3, p. 4]. The automobile batteries described in the PA were not observed by START personnel [3, p. 6].

Four 55-gallon drums were observed by START scattered around the property. Three of the drums were empty and the fourth drum contained waste oil. Piles of miscellaneous automobile parts and tires were also observed throughout the property [3, p. 4]. START personnel also observed a pile of refuse, tires, small engine parts, and an abandoned vehicle in the unnamed intermittent stream and in the West Branch Passumpsic River [3, p. 10].

During the on-site reconnaissance, START observed that the area to the south of the garage bays appeared to be newly paved with asphalt. This area was not paved during the PA in 1989. The asphalt pavement likely covers the waste oil spill area and the area noted in the 1989 PA [3, p. 9]. Groundwater seeps were also observed along the east side of the property, in the wetland adjacent to West Branch Passumpsic River [3, p. 7].

START personnel conducted a Site Inspection (SI) sampling event on 24 and 25 November 1997 at the WBAB property. START personnel collected eight source/soil samples, six surface water samples, six sediment samples, and three drinking water samples. START samples were analyzed for VOCs, semivolatile organic compounds (SVOCs), pesticides/polychlorinated biphenyls (pest/PCBs), metals, and cyanide through the EPA Region I Contract Laboratory Program (CLP). Sediment samples, as well as the VOC portions of drinking water samples, were analyzed through a Delivery of Analytical Services (DAS) laboratory.

Analytical results from these tests indicate the presence of contaminants throughout the property. The highest concentrations of contaminants were found at the most upstream probable point of entry (PPE) area into the unnamed stream that flows through the wetland east of the property. Sediment and surface water samples collected from this area indicate the presence of aluminum, barium, chromium, lead, mercury, acetone, and methylene chloride. Drinking water samples collected from the on-site well contained barium and potassium. Other contaminants identified on-site include bis(2-ethylhexyl)phthalate, selenium, manganese, di-n-butyl phthalate, butylbenzyl

phthalate, alpha-chlordane, methoxychlor, and aroclor-1254. For more detailed results refer to the appropriate pathway section of this report: groundwater, surface water, soil exposure, and air migration.

Table 1 presents identified structures or areas on the WBAB property that are documented or potential sources of contamination, the containment factors associated with each source, and the relative location of each source.

Table 1
Source Evaluation for West Burke Auto Body

Source Area	Containment Factors	Spatial Location
Pile of Waste Paints	None	On the ground surface below the east facing garage window.
Drains (including pipes leading to the dry well)	None	Located in the garage bays, and run underground to the dry well.
Dry well	None	Underneath the floor of the Quonset hut.
Piles of Scrap Automobile Parts	None	Scattered all over the property.
Waste Oil Drum	None	Between the garage and Quonset hut.
Miscellaneous Containers in Garage	None	Located in the east and west bays of the garage.
Automobile Batteries	None	Located in the garage. *

<sup>\*</sup> Noted at the time of the PA, but not present at the time of the 6 June 1997 START on-site reconnaissance.

[1; 3; 5; 6; 8; 9; 12]

Table 2 summarizes the types of potentially hazardous substances which have been disposed, used, or stored on the WBAB property.

Table 2

### Hazardous Waste Quantity for West Burke Auto Body

Substance	Quantity or Volume/Area	Years of Use/Storage	. Years of Disposal	Source Area
Waste paint	Unknown	Unknown (After 1965)	Unknown (After 1965)	Contaminated Soil, Dry Well, Miscellaneous Containers, Drains
Lacquer	Unknown	Unknown (After 1965)	Unknown (After 1965)	Contaminated Soil
Lacquer and Paint Thinners	Unknown	Unknown (After 1965)	Unknown (After 1965)	Contaminated Soil, Dry Well, Drains
Waste Oil	One 55-gallon drum	Unknown (After 1965)	Unknown (After 1965)	Waste Oil Drum, Dry Well, Drains
Metal Debris	Approximately 250 ft <sup>2</sup>	Unknown (After 1965)	Unknown (After 1965)	Piles
Miscellaneous Liquids *	Approximately 60 gallons	Unknown (After 1965)	Unknown (After 1965)	Miscellaneous Containers in Garage
Methylene Chloride	Unknown	Unknown (After 1965)	Unknown (After 1965)	Contaminated Soil
Toluene	Unknown	Unknown (After 1965)	Unknown (After 1965)	Contaminated Soil
Acetone	Unknown	Unknown (After 1965)	Unknown (After 1965)	Contaminated Soil
Methyl Ethyl Ketone	Unknown	Unknown (After 1965)	Unknown (After 1965)	Contaminated Soil

These containers included waste paints, enamel, upholstery cleaner, an oxygen cylinder, an acetylene cylinder, and unlabeled containers.

ft<sup>2</sup> = Square feet.

[1; 3; 4; 5; 8]

No Comprehensive Environmental Response, Compensation, and Liability Information System (CERCLIS) or National Priority List sites are located within 1-radial mile of the WBAB property. Burke Lumber Company is the only RCRIS hazardous waste generator located within 1-radial mile of WBAB property [7, 36].

#### WASTE/SOURCE SAMPLING

According to available information, waste/source (soil) samples were collected on three occasions in 1988 by VT ANR that contained elevated concentrations of acetone, methyl ethyl ketone, methylene chloride, and toluene [1, p. 4]. Specific concentrations of the contaminants were not listed in the available information.

On 24 and 25 November 1997, START personnel collected eight waste/source (soil) samples from the WBAB property. The waste/source samples were analyzed for VOCs, SVOCs, pest/PCBS, total metals, and cyanide through the CLP. Waste/source samples collected by START are presented in Table 3.

Table 3

Sample Summary: West Burke Auto Body
Waste/Source Samples Collected by START on 24 and 25 November 1997

Sample Location No.	Traffic Report No.	Time (hours)	Remarks	Sample Source				
MATRIX: Source (Soil)								
SS-01	ANL40 MAKZ22	L150	Grab 12" to 18" bgs	Waste/Source sample collected east of Route 5 and south of the on-site residence. Location: 216 feet at 175° from the telephone pole located west of the on-site residence. Soil material consisted of light brown topsoil with organic matter and pebbles.				
SS-02	ANL41 MAKZ23	1315	Grab 14" to 24" bgs	Soil sample collected among automobile bodies, south of the driveway. Location: 96 feet at 169° from the southwest corner of the WBAB garage. Soil material consisted of red-brown sand and clay with organic matter.				
SS-03	ANL42 MAKZ24	1250	Grab 12" to 24" bgs	Soil sample collected approximately 3 feet east of the southeastern window of the West Burke Auto Body garage, between the garage and Quonset hut. Location: 13.5 feet at 72° off north from the southeastern corner of the West Burke Auto Body garage.				
SS-04	ANL43 MAKZ25	1430	Grab 6" to 16" bgs	Soil sample collected from the slope on the eastern property boundary, approximately 12 feet west and upgradient of the wetlands. Location: 29 feet at 351° from the northeast corner of the on-site drinking water well. Soil material consisted of highly organic loam and sand.				

Table 3

Sample Summary: West Burke Auto Body

Waste/Source Samples Collected by START on 24 and 25 November 1997 (Concluded)

Sample Location No.	Traffic Report No.	Time (hours)	Remarks	Sample Source
SS-05	ANL44 MAKZ26	1115	Grab 8" to 14" bgs	Soil sample collected approximately 3 feet west of the northwestern window of the garage. Location: 26 feet at 220.5° from the northwest corner of the garage, approximately 60 feet from the on-site residence. Soil material consisted of brown topsoil with organic matter and 1-inch pebbles.
SS-06	ANL45 MAKZ27	1100	Grab 8" to 14" bgs	Soil sample collected as a reference sample.  Location: 24 feet at 165° from the telephone pole, west of the on-site residence. Soil material consisted of brown topsoil with organic matter and 1-inch pebbles.
SS-07	MAKZ28	1100	Grab 8" to 14" bgs	Soil sample collected adjacent to SS-06 location, for metals analysis only. Location: 24 feet at 165° from the telephone pole in front of the onsite residence. Soil material consisted of brown topsoil with organic matter and 1-inch pebbles.
S\$-08	ANL73 MAKZ54	1315	Grab 14" to 24" bgs	Duplicate of SS-02 for quality control. Location: 96 feet at 169° off north from the southwest corner of the West Burke Auto Body garage.

WBAB = West Burke Auto Body. bgs = Below ground surface.

[3]

Table 4 is a summary of organic compounds and inorganic elements detected through CLP analyses of START waste/source samples. For each sample location, a compound or element is listed if it is detected at three times or greater than the reference sample concentration (SS-06/SS-07). However, if the compound or element is not detected in the reference sample, the reference sample's sample quantitation limit (SQL) (for organic analyses) or sample detection limit (SDL) (for inorganic analyses) is used as the reference value.

Table 4

#### Summary of Analytical Results, Waste/Source Sample Analysis for West Burke Auto Body 24 and 25 November 1997

Sample Location	Compound/ Element		ample entratio	on		Referen ncentra		Comments
SS-01	PEST/PCBs							
ANL40 MAKZ22	Methoxychlor	24		μ <b>g</b> /kg	22	υ	μg/kg	1.1 × SQL
	alpha-Chlordane	3.5		μg/kg	2.2	IJ	μg/kg	1.6 × SQL
SS-02	SVOCs				<u> </u>			
ANL41 MAKZ23	Di-n-butylphthalate	1,100	J	μg/kg	430	UJ	μg/kg	2.6 × SQL
	Butylbenzyl phthalate	13,000*	J	μg/kg	94	J	μg/kg	138 × Ref
	INORGANICS							
	Barium	318		mg/kg	28.1		mg/kg	11.3 × Ref
	Lead	165	J <sup>*</sup>	mg/kg	36.4	J	mg/kg	4.53 × Ref
	Zinc	136	J	mg/kg	41.3	UJ	mg/kg	3.29 × SDL
SS-05	SVOCs							
ANL44 MAKZ26	Butylbenzyl phthalate	460	ſ	μ <b>g/k</b> g	94	J	μg/kg	4.9 × Ref
	Bis(2-ethylhexyl)phthalate	460	J	μ <b>g/k</b> g	55	EBJ	μg/kg	8.4 × Ref
SS-08	SVOCs							
ANL73 MAKZ54	Di-n-butylphthalate	1,300	J	μg/kg	430	ſŰ	μg/kg	3.0 × SQL
	Butylbenzyl phthalate	6,000 *	J	μg/kg	94	1	μg/kg.	63.8 × Ref
	Bis(2-ethylhexyl)phthalate	500	EBJ	μg/kg	55	EBJ	μg/kg	9.1 × Ref
3	PEST/PCBs					· · · · · · · · · · · · · · · · · · ·		
	Aroclor-1254	76		μ <b>g</b> /kg	43	υ	μg/kg	1.8 × SQL

#### Table 4

## Summary of Analytical Results Waste/Source Sample Analysis for West Burke Auto Body 24 and 25 November 1997 (Concluded)

Sample Location	Compound/ Element	Sam Concen	•	Referen Concentra		Comments
SS-08	INORGANICS				•	
ANL73 MAKZ29	Barium	423	mg/kg	28.1	mg/kg	15.1 × Ref
(Concluded)	Lead	245	J mg/kg	36.4 J	mg/kg	6.73 × Ref
	Zinc	176	J mg/kg	41.3 UJ	mg/kg	4.26 × SDL

REI	- Reference value.
J	<ul> <li>Quantitation is approximate due to limitations identified during the quality control review.</li> </ul>
U	= Indicates the substance was analyzed for but not detected; the associated numerical value is the
	detection value.
UJ	= The reported quantitation limits are qualified estimated.
Pest/PCBs	= Pesticide/Polychlorinated biphenyls.
SVOCs	= Semivolatile organic compounds.
SQL	= Sample Quantitation Limit.
SDL	= Sample Detection Limit.
μg/kg	= Micrograms/kilogram.
mg/kg	= Milligrams per kilogram.
EB	= Also found in equipment blank.
*	= Results reported from diluted analysis.

⇒ Reference value

[29-35]

Daf

Complete analytical results of START waste/source samples including quantitation and detection limits are presented in Attachment A. Sample results quantified with a "J" on analytical tables are considered approximate because of limitations identified during CLP data validation. In addition, organic sample results reported at concentrations below quantitation limits and confirmed by mass spectrometry are also qualified by a "J" and considered approximate.

No VOCs were detected in soil samples collected from the WBAB property.

Three SVOCs were detected at the WBAB property. Di-n-butylphthalate was detected at 1,100  $\mu$ g/kg in sample SS-02. Sample SS-05, located within 200 ft of Mr. McCoy's on-site residence, was found to contain butylbenzyl phthalate at 460 micrograms per kilogram ( $\mu$ g/kg), and bis(2-ethylhexyl)phthalate at 460  $\mu$ g/kg [29 - 35]. Both substances are plasticizers, and are used in the production of flexible plastic parts commonly found in automobiles [40, p. 1; 41, p. 1].

Two pesticides and one PCB were also detected at the WBAB property. Methoxychlor was detected in sample SS-01 at 24  $\mu$ g/kg, and alpha-chlordane was detected at 3.5  $\mu$ g/kg, also in sample SS-01. Aroclor-1254 was detected at 76  $\mu$ g/kg in sample SS-08. PCBs are not known to have been used or stored on the WBAB property.

Three metals were detected in surficial soil samples collected from the WBAB property. All three were detected in samples SS-02, and SS-08 (replicate of SS-02). Barium was detected in sample SS-08 at 423  $\mu$ g/kg, lead was detected at 245 mg/kg (SS-08), and zinc was detected at 176 mg/kg (SS-08). Barium, zinc and lead were also detected in drinking water and surface water samples as well as in source/soil samples.

START performed source sampling as part of the WBAB SI to characterize contaminants on site related to previous activities. Analytical results from both the 1988 source sampling by VT ANR and waste/source sampling conducted by START, documented a release of hazardous substances which are at least partially attributable to on-site sources. An unknown volume of contaminated soil was reportedly excavated from the area below the garage window in 1988 by an unknown party.

#### GROUNDWATER PATHWAY

Bedrock in the area of the WBAB property is comprised of gray quartzose and micaceous crystalline limestone weathered to a distinctive brown earthy crust, interbedded and intergradational with gray quartz-muscovite phyllite or schist of the Waits River Formation [1, p. 2]. No bedrock formation mapped within 4-radial miles of the property exhibits karst characteristics. Depth to bedrock beneath the WBAB property is unknown. Soils within the area are mapped as belonging to the Windsor, gravelly-Windsor association. The soils are defined as excessively drained, sandy and gravelly soils low in lime, occurring in deltas and terraces along rivers and streams [1, pp. 2, 3]. Surficial geology at the property consists of swamp and peat deposits, and Recent Alluvium. Glacial deposits in the area also consist of kame terrace and till deposits [13]. Depth to groundwater beneath the WBAB property is approximately 7 ft below ground surface (bgs) [12]. Groundwater flow below the property is assumed to be in a southeasterly direction towards the West Branch Passumpsic River [17]. Annual precipitation, as measured in Burke, Vermont is 40.3 inches [28].

No groundwater monitoring wells are located on the property. An estimated 1,092 people obtain drinking water from public and private groundwater wells located within 4-radial miles of the WBAB property [14]. There are three public drinking water supplies within 4-radial miles of the WBAB property. The Burke public water supply is located 0.8 miles northwest of the property. This system serves 57 people and is located within the Town of Burke. The Burke Mobile Estates public water supply is located in Burke Hollow, 1.3 miles southeast of the WBAB property. This public water supply serves 30 people. The Lyn Haven Inc., well serves 114 people and is located in Lyndon, 3.9 miles south of the WBAB property [1; 15].

The nearest private groundwater drinking water well is located on the property, and is a potable drinking water source [1, p. 4; 3, p. 7]. The on-site well is approximately 300 ft downgradient of the nearest source area [3, p. 7]. This well serves one person [5].

Table 5 summarizes public groundwater supply sources located within 4-radial miles of the WBAB property.

Table 5

Public Groundwater Supply Sources Within 4-Radial Miles of
West Burke Auto Body

Distance/ Direction from Site	Source Name	Location of Source*	Estimated Population Served	Source Type <sup>b</sup>
0.8 miles/Northwest	West Burke Housing	West Burke	57	Bedrock
1.3 miles/Southeast	Burke Mobile Estates	Burke Hollow	30	Overburden
3.9 miles/South	Lyn Haven Inc.	Lyndon	114	Bedrock

Indicates Town in which well is located.

[1; 14; 15]

Private groundwater supplies within 4-radial miles of the WBAB property were estimated using equal distribution calculations utilizing U.S. Census CENTRACTS data identifying population, households, and private water wells for "Block Groups" which lie within or partially within individual radial distance rings of the property [14]. In addition, local water departments were contacted to determine the nearest private drinking water well [15; 16]. The following table identifies the estimated drinking water populations served by groundwater sources within 4-radial miles of the WBAB property. The nearest private residence is located on-site, this residence receives its water from a private on-site well.

Table 6

Estimated Drinking Water Populations Served by Groundwater Sources
Within 4-Radial Miles of West Burke Auto Body

Radial Distance From West Burke Auto Body (miles)	Estimated Population Served by Private Wells	Estimated Population Served by Public Wells	Total Estimated Population Served by Groundwater Sources Within the Ring
> 0.00 to 0.25	7	0	7
> 0.25 to 0.50	22	0.00	22
> 0.50 to 1.00	71	57	128
> 1.00 to 2.00	254	30 10 28 18	284
> 2.00 to 3.00	269	0	269
> 3.00 to 4.00	268	114	382
TOTAL	891	201	1,092

[1; 14; 15; 16]

<sup>&</sup>lt;sup>b</sup> Overburden, Bedrock, or Unknown.

The on-site drinking water well was sampled in 1988 by VT ANR [9]. The drinking water well sample was analyzed for VOCs by an unspecified method. No VOCs were detected above an unspecified detection limit [9]. Further information regarding the collection and analysis of the aforementioned sample was unavailable to START.

On 24 and 25 November 1997, START personnel collected two drinking water samples (DW-01/02) from the WBAB property, and a reference sample (DW-03) from a well on an adjacent property. Drinking water samples were analyzed for low concentration VOCs, SVOCs, pest/PCBs, total metals, and cyanide. Drinking water samples collected by START are presented in Table 7.

Table 7
Sample Summary: West Burke Auto Body Drinking Water Samples Collected by START on 24 and 25 November 1997

Sample Location No.	Traffic Report No.	Time (hours)	Remarks	Sample Location No.
MATRIX: Aqueou	19			
DW-01	DAFHI3 ANL46 MAKZ29	0900	Grab	Drinking water sample collected from the on-site kitchen faucet. There was no filter or aerator present in the water system.
DW-02	DAFH14 ANL47 MAKZ30	0912	Grab	Replicate sample of DW-01.
DW-03 (Matrix Spike/ Matrix Spike Duplicate)	DAFHI5 ANL48 MAKZ31	1605	Grab	Drinking water sample collected as a reference sample from the kitchen faucet of an off-site residence abutting the West Burke Auto Body property to the north. The filter was bypassed and the aerator was removed prior to collecting the sample.

[29 - 35]

START collected three groundwater samples from two drinking water wells as part of the WBAB property SI. Samples were collected from the tap, pre-treatment. The reference well (DW-03) is located on the adjacent property, approximately 50 ft from the northwest corner of the WBAB property. The 100 ft deep well (DW-03) is upgradient/crossgradient of the WBAB well, and screened in bedrock. The WBAB property well is located approximately 300 ft east of the garage, on the slope leading down to the unnamed stream. The WBAB well is an overburden well, and is approximately four ft deep [3, p. 7]. START has no reason to believe that the overburden and the bedrock aquifers in this area are not interconnected, however, the reference well may not reflect background conditions in the target well due to depth, location and well construction, therefore analytical data from the two wells will not be compared.

There were no VOCs, SVOCs, pesticides or PCBs detected in the reference well. However, a total of 13 inorganic elements were detected in the reference well, including cadmium  $(1.6 \,\mu\text{g/L})$ , chromium  $(1.7 \,\mu\text{g/L})$ , copper  $(343 \,\mu\text{g/L})$ , lead  $(15.2 \,\mu\text{g/L})$ , and zinc  $(59.6 \,\mu\text{g/L})$ . Only lead was detected above health based benchmarks: Vermont Groundwater Quality Standards,  $5.0 \,\mu\text{g/L}$ ; MCL (Maximum Concentration Limit),  $15.0 \,\mu\text{g/L}$  [37, p. B34; 39, pp. 28-32]. While these substances may be partially attributable to processes performed at WBAB, it should also be noted that they are naturally occurring substances.

There were no VOCs, SVOCs, pesticides or PCBs detected in the WBAB well. However, there were eight inorganic elements detected in the WBAB well, including barium at 15.1  $\mu$ g/L (DW-01 and DW-02), copper at 28.8  $\mu$ g/L (DW-01) and 32.0  $\mu$ g/L (DW-02), and zinc at 9.9  $\mu$ g/L (DW-01) and 21.6  $\mu$ g/L (DW-02). No substances were detected above Vermont Groundwater Quality Standards, or MCLs [37; 39, pp. 28-32]. Barium is frequently used in many aspects of automobile manufacture and repair, including: the production of paints and enamels, as an additive in lubricating oils, engine rod bearings, and spark plugs [42, pp. 1 and 5]. Copper is used extensively in the electrical wiring of automobiles. Zinc is used for galvanizing steel, and in paint [46, pp. 1 and 5]. Barium and zinc were also detected in soil and surface water samples collected from the WBAB property. Although all three substances are naturally occurring, their presence could be partially attributable to the on-site repair and storage/disposal of automobiles and associated substances.

#### SURFACE WATER PATHWAY

The topography of the WBAB property slopes gently to the southeast. Surface water runoff from the property is assumed to flow south and east, toward the unnamed stream and the unnamed intermittent stream, respectively. Surface water runoff from the western portion of the property is assumed to flow south toward the unnamed intermittent stream, located along the southern property boundary. Surface water runoff from the eastern portion of the property is assumed to flow east toward the unnamed stream, located approximately 300 ft east of the garage. The most upstream PPE to surface water from the property is presumed to be through overland runoff to the unnamed stream. Wetlands abut the property to the east and southeast, and are also located between the unnamed stream and its confluence with the West Branch Passumpsic River. The intermittent stream converges with the unnamed stream approximately 300 ft southeast of the PPE. This stream then converges with the West Branch Passumpsic River [3, p. 5].

Surface water bodies along the 15-mile downstream pathway from the property include the unnamed stream, West Branch Passumpsic River and Passumpsic River. The unnamed stream converges with West Branch Passumpsic River approximately 300 feet further downstream from the convergence of the unnamed intermittent stream and the unnamed stream. West Branch Passumpsic River then flows south for approximately 7.4 miles to Passumpsic River. Passumpsic River flows south for approximately 7.5 miles where the terminus of the 15-mile downstream pathway occurs in the Town of St. Johnsbury, Vermont [17; 18; 19; 20]. The unnamed stream, West Branch Passumpsic River and Passumpsic River are used as recreational fisheries [1, p. 2; 21]. No known surface water intakes are located along the 15-mile downstream pathway from the property (Figure 3) [21].

Table 9 summarizes surface water bodies along the 15-mile downstream pathway from the property.

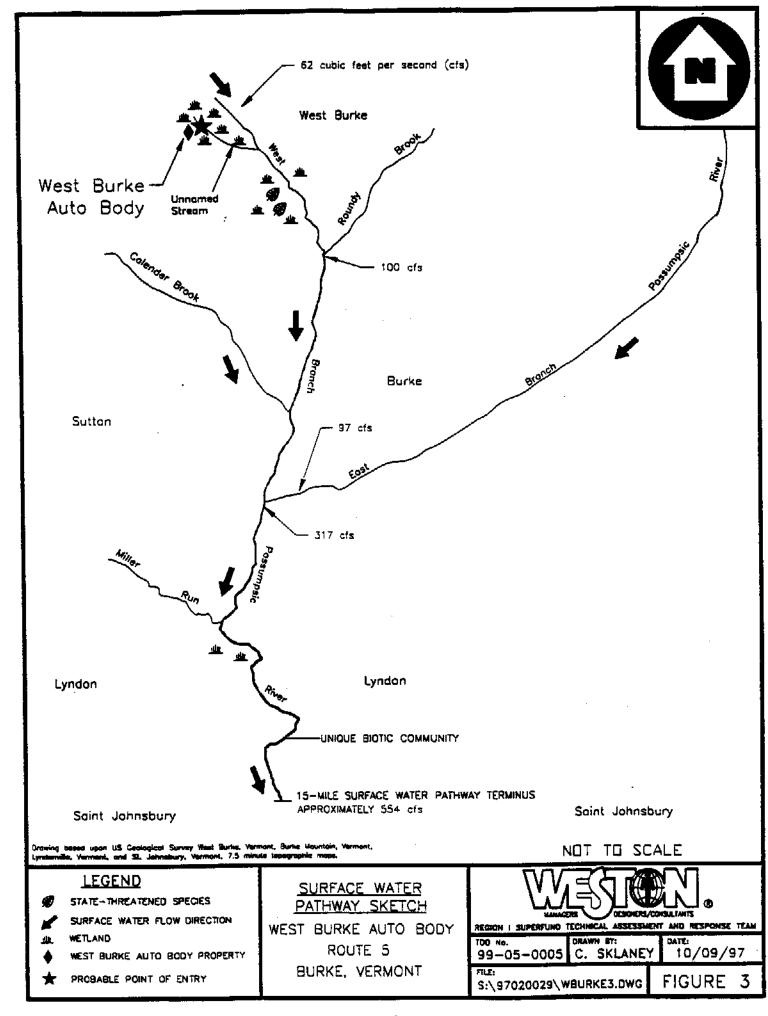


Table 9

Surface Water Bodies Along the 15-Mile Downstream Pathway from West Burke Auto Body

Surface Water Body	Descriptor*	Length of Reach (miles)	Flow Characteristics (cfs) <sup>6</sup>	Length of Wetland Frontage (miles)
Unnamed Stream	Minimal stream	0 - 0.1	7.2	0.1
West Branch Passumpsic River	Small to Moderate Stream	0.1:-2.5	62	0.7
West Branch Passumpsic River	Moderate to Large Stream	2.5 - 7.5	317	0.5
Passumpsic River	Moderate to Large Stream	7.5 - 15.0	554	2.8

Minimal stream <10 cfs. Small to moderate stream 10-100 cfs. Moderate to large stream >100-1,000 cfs. Large stream to river >1,000-10,000 cfs. Large river >10,000-100,000 cfs. Very large river >100,000 cfs. Coastal tidal waters (flow not applicable). Shallow ocean zone or Great Lake (flow not applicable). Moderate depth ocean zone or Great Lake (flow not applicable). Three-mile mixing zone in quiet flowing river 10 cfs or greater.

b Cubic feet per second.

Note: Flow characteristics were determined by measuring the drainage basins of the West Branch Passumpsic River and Passumpsic River. A transparent grid was used to calculate the square miles in each basin. This mileage was then converted to cubic feet per second using the conversion factor of 1.8 cfs per square mile. The flow rate for the unnamed stream was estimated to be < 10 cfs for the purposes of the SI.

[23 - 30]

Sensitive environments located along the 15-mile surface water pathway include a Clean Water Act-protected water body and an estimated 4 miles of wetland frontage [23-27]. There is also a habitat for a State-threatened species located approximately 2 miles downstream, as well as a significant natural community located approximately 11 miles downstream from the PPE [37]. Table 10 summarizes the sensitive environments along the 15-mile downstream pathway from the WBAB property.

Table 10

Sensitive Environments Along the 15-Mile Downstream Pathway from West Burke Auto Body

Sensitive Environment Name	Sensitive Environment Type	Water Body	Downstream Distance from PPE (miles)	Flow Rate at Environment (cfs)*
Unnamed stream	Clean Water Act	Unnamed stream	0 - 0.1	7.2
Unnamed stream	Wetlands (0.1)	Unnamed stream	0 - 0.1	7.2
West Branch Passumpsic River	Wetlands (0.7)	West Branch Passumpsic River	0.1 - 2.5	62
Habitat for State- Threatened Species	Habitat for State- Threatened Species	West Branch Passumpsic River	0:1 - 2:5	62
West Branch Passumpsic River	Wetlands (0.5)	West Branch Passumpsic River	2.5 - 7.5	317
Passumpsic River	Wetlands (2.8)	Passumpsic River	7.5 - 15.0	554
Unique Biotic Community	Unique Biotic Community	Passumpsic River	7.5 - 15.0	429

<sup>&</sup>lt;sup>a</sup> Cubic feet per second

PPE = Probable point of entry.

[23-29; 38]

Prior to the START sampling event, no known surface water or sediment samples were collected from any portion of the surface water pathway associated with the WBAB property.

During the 6 June 1997 START on-site reconnaissance, scrub-shrub and forested wetlands were observed on the east side of the property, in the low-lying area surrounding the unnamed stream. Tires, scrap automobile parts, an abandoned vehicle, and miscellaneous debris were observed in the wetlands and in the unnamed stream [3, p. 10].

On 24 and 25 November 1997, START personnel collected six surface water and six sediment samples from the surface water pathway associated with the WBAB property. All of the surface water/sediment samples were analyzed for VOCs, SVOCs, pest/PCBs, total metals, and cyanide. Sample summary information for surface water and sediment samples collected by START are presented in Table 11.

Table 11

Sample Summary: West Burke Auto Body
Surface Water/Sediment Samples Collected by START on 24 and 25 November 1997

		T	····	
Sample Location No.	Traffic Report No.	Time (hours)	Remarks	Sample Source
MATRIX: A	queous			
SW-01	ANL53 MAKZ34	1400	Grab	Surface water sample collected 260 ft downstream from the confluence of the intermittent stream and the unnamed stream, to establish impact on targets. Location: Azimuth points could not be determined from a fixed location.
SW-02 (MS/MSD for VOCs)	ANL54 MAKZ35	0910	Grab	Surface water sample collected at the confluence of the intermittent stream and the unnamed stream, to confirm an observed release to surface water. Location: 25 ft at 143° from north of the on-site drinking water well.
SW-03 (MS/MSD)	ANL55 MAKZ36	0920	Grab	Surface water sample collected in the intermittent stream, east of the culvert on Route 5, to serve as a reference sample. Location: 115 ft at 162° off north from the southeast corner of the Quonset hut.
SW-04	ANL56 MAKZ37	0945	Grab	Surface water sample collected from the wetlands of the unnamed stream, to confirm an observed release to surface water. Location: 52 ft at 27° off north. from the on-site drinking water well.
SW-05	ANL57 MAKZ38	1030	Grab	Surface water sample collected from the wetlands of the unnamed stream, east of the West Burke Auto Body property, at the PPE to surface water. Location: 91 ft at 48° off north from the northeast corner of the drinking water well.
SW-06	ANL58 MAKZ39	1035	Grab	Replicate of SW-04 for quality control.
MATRIX: Se	ediment			
SD-01	DAFC37	1410	Grab	Sediment sample collected 260 ft downstream from the confluence of the intermittent stream and the unnamed stream. Location: Azimuth points could not be determined from a fixed location.
SD-02 (MS/MSD)	DAFC38 MAKZ41	1430	Grab	Reference sample. Sediment sample collected from the unnamed intermittent stream at the confluence of the intermittent stream and the unnamed stream to serve as a reference sample. Location: 25 ft at 143° off north from the southeast corner of the on-site drinking water weil.

#### Table 11

# Sample Summary: West Burke Auto Body Surface Water/Sediment Samples Collected by START on 24 and 25 November 1997 (Concluded)

Sample Location No.	Traffic Report No.	Time (hours)	Remarks	Sample Source
MATRIX: S	ediment (Conclu	ded)		
SD-03	DAFC39 MAKZ42	1310	Grab	Sediment sample collected from the wetlands of the unnamed stream. Location: 52 ft at 27° off north from the on-site drinking water well.
SD-04	DAFH10 MAKZ43	1312	Grab	Duplicate of SD-03 for quality control. Location: same as SD-03.
SD-05	DAFH11 MAKZ44	1530	Grab	Sediment sample collected at the PPE, in the wetlands of the unnamed stream. Location: 91 ft at 48° off north from the northeast corner of the drinking water well.
SD-06	DAFH12 MAKZ45	1540	Grab	Sediment sample for metals analysis only, collected adjacent to SD-05.

VOCs -

Volatile organic compounds.

MS/MSD

= Matrix spike/Matrix spike duplicate.

PPE

= Probable point of entry.

ft

= Feet

Samples SW-05, SD-05/SD-06 were to be collected from the head of the unnamed stream, as reference samples. Upon observation of field conditions, this sample point was determined by START to represent the furthest upstream PPE to the unnamed stream. However, the headwaters of the unnamed stream is located at the base of an incline covered with tires, scrap automobile parts, an abandoned vehicle, and miscellaneous debris. This is also directly downslope from the dry well located beneath the Quonset hut. Groundwater seeps were noted by START at the base of this incline [3, pp. 6-7]. Evaluation of analytical results, support observations that this represents the PPE.

START further determined based upon field observations, that due to lack of an upstream reference sample, samples SW-03 and SD-02, collected from the unnamed intermittent stream would be used as reference samples. Sample SD-02 was collected near the confluence of the unnamed intermittent stream and the unnamed stream, and SW-03 was collected upstream of SD-02 in the area of a potential PPE. Although these samples were collected downstream of an abandoned car body, there were no other signs of contamination in the unnamed intermittent stream. There was no engine, nor any other moving parts in the abandoned car body in the unnamed intermittent stream, therefore the only substance assumed to be associated with the abandoned car body was iron. Analytical data indicates concentrations of substances detected in SW-03/SD-02 are much lower than those detected in SW-05 and SD-05/SD-06. Upon comparison to other samples collected from the property, START determined that these samples (SW-03 and SD-02) are representative of background conditions at the WBAB property.

Table 12 is a summary of organic compounds and inorganic elements detected through CLP and DAS analyses of START surface water/sediment samples. For each sample location, a compound or element is listed if it is detected at three times or greater than the reference sample concentration (SW-03/SD-02). However, if the compound or element is not detected in the reference sample, the SQL (for organic analyses) or SDL (for inorganic analyses) is used as the reference value.

Summary of Analytical Results
Surface Water/Sediment Sample Analysis for West Burke Auto Body
24 and 25 November 1997

Sample Location	Compound/ Element		mple entration	Reference Concentration	Comments
SW-01	INORGANICS				
(MAKZ34)	Nickel	1.4	J μg/L	1.3 U µg/L	1.1× SDL
SW-04	INORGANICS				
(MAKZ37)	Lead	21.0	J μg/L	3.7 J µg/L	5.7 × Ref
	Zinc	76.6	J μg/L	23.1 J μg/L	3.31 × Ref
	Nickel	2.1	J μ <b>g/L</b>	1.3 μg/L	1.6 × SDL
<del></del>	VOCs				
SW-05 (MAKZ38)	Acetone	10	J μg/L	l0 U μg/L	1.0 × SDL
	INORGANICS	····			
	Aluminum	12,800	μg/L	287 μg/L	44.6 × Ref
	Barium	74.8	μ <b>g/L</b>	13.0 μg/L	5.75 × Ref
	Chromium	25.2	μg/L	0.71 J µg/L	35.5 × Ref
	Cobalt	7.0	J μg/L	1.1 U μ <b>g/L</b>	6.4 × SDL
	Iron	21,200	J μg/L	431 J μg/L	49.2 × Ref
	Lead	47.9	l μg/L	3.7 J μg/L	12.9 × Ref
	Мапдалезе	2,500	J μg/L	63.1 J μg/L	39.6 × Ref
	Mercury	0.15	J μg/L	0.10 UJ μg/L	1.5 × SDL
	Nickel	27.2	μg/L	1.3 U μg/L	20.9 × SDL
	Vanadium	20.1	μg/L	1.4 U μg/L	14.4 × SDL
	Zinc	109	J μg/L	23.1 J µg/L	4.7 × Ref

#### Table 12

# Summary of Analytical Results, Surface Water/Sediment Sample Analysis for West Burke Auto Body 24 and 25 November 1997 (Continued)

Sample Location	Compound/ Element		Sample centrati	on		Referer ncentr	-	Comments
SD-01	VOCs		<u> </u>					
(DAFC37)	Acetone	380	EBJ	μg/kg	36	EB	μg/kg	I0.6 × Ref
	INORGANICS							"
	Selenium	2.6	J	mg/kg	1.1	U	mg/kg	2.36 × SDL
SD-03	SVOCs						· · · · · · · · · · · · · · · · · · ·	
(DAFC39)	Bis(2-ethylhexyl)phthalate	11,000	. 1	μg/kg	960	1	μg/kg	11.5 × Ref
SD-05	VOCs			·				
(DAFHII)	Methylene Chloride	380	TBJ	μg/kg	14	IJ	μg/kg	27.1 × SQL
	Acetone	11,000	EBJ	μg/kg	36	EB	μg/kg	306 × Ref
	INORGANICS							
	Arsenic	3.8		mg/kg	1.1	U	mg/kg	3.45 × SDL
	Beryllium	1.5		mg/kg	0.5		mg/kg	3.00 × Ref
	Chromium	61.9		mg/kg	19.8	<del>.</del> .	mg/kg	3.12 × Ref
	Manganese	851		mg/kg	199		mg/kg	4.28 × Ref
	Mercury	0.25	J	mg/kg	0.08	U	mg/kg	3.13 × SDL
	Vanadium	26.1	· 	mg/kg	13.0	ប	mg/kg	2.01 × SDL
SD-06 (DAFH12)	INORGANICS							
(DAFRIZ)	Arsenic	3.5		mg/kg	1.1	U	mg/kg	3.18 × SDL
	Cadmium	0.24		mg/kg	0.13	U	mg/kg	1.85 × SDL
	Manganese	927		mg/kg	199		mg/kg	4.66 × Ref
	Mercury	0.19	J	mg/kg	0.08	U	mg/kg	2.38 × SDL

Ref = Reference value.

J = Quantitation is approximate due to limitations identified during the quality control review.

U = Indicates the substance was analyzed for but not detected; the associated numerical value is the detection value.

UJ = The reported quantitation limits are qualified estimated.

VOCs = Volatile organic compounds. SVOCs = Semivolatile organic compounds.

#### Table 12

### Summary of Analytical Results, Surface Water/Sediment Sample Analysis for West Burke Auto Body 24 and 25 November 1997 (Concluded)

SQL = Sample Quantitation Limit. SDL = Sample Detection Limit.

 $\mu g/L$  = Micrograms/liter = parts per billion (ppb)

μg/kg = Micrograms/kilogram = ppb

mg/kg = Milligrams/kilogram = parts per million (ppm)

EB = Detected in equipment blank.

TB = Detected in trip blank.

[29-35]

Two VOCs, acetone and methylene chloride, were detected in START sediment and surface water samples collected from the unnamed stream. Acetone concentrations ranged from  $10~\mu g/L$  (SW-05), to  $11,000~\mu g/kg$  (SD-05); methylene chloride was only detected in sample SD-05, at a concentration of  $380~\mu g/kg$  [29; 30; 31; 32]. Both substances are common components of cleaners/degreasers used in the automobile salvage, repair and painting business. These substances are most likely associated with discharge from the floor drains in the garage, and the dry well below the Quonset hut. Although acetone and methylene chloride were detected in previous soil sampling events, neither substance was detected in any START source/soil samples [31; 32].

Bis(2-ethylhexyl)phthalate was detected at  $11,000 \,\mu\text{g/kg}$  in sample SD-03, and was the only SVOC detected in surface water and sediment samples [29; 30; 31; 32]. Bis(2-ethylhexyl)phthalate was also detected in surficial soil samples. No pesticides or PCBs were detected in sediment or surface water samples collected from the WBAB property.

A total of 14 metals were detected in START sediment and surface water samples. Inorganic elements detected in START surface water and sediment samples include aluminum, chromium, and iron, which are all commonly associated with automobiles, automobile parts and automobile repair activities. In addition, barium was detected at 74.8  $\mu$ g/L in surface water sample SW-05, zinc was detected in surface water samples at concentrations ranging from 76.6  $\mu$ g/L (SW-04), to 109  $\mu$ g/L (SW-05), and lead ranged from 21.0  $\mu$ g/L (SW-04) to 47.9  $\mu$ g/L (SW-05). Barium, zinc and lead were also detected in source/soil and drinking water samples as well as in surface water samples.

START performed surface water and sediment sampling as part of the WBAB property SI. No other surface water pathway sampling event is known to have been conducted at the WBAB property. Based on analytical results, and observation of vehicles and miscellaneous debris disposed of directly into the surface water pathway, a release of hazardous substances to the unnamed stream has been noted from on-site sources. As a result of the release, a Clean Water Act-protected water body and a fishery have been impacted. No other sensitive environments are known or suspected to have been impacted. To date, no known actions have been taken to address the release to the unnamed stream.

#### SOIL EXPOSURE PATHWAY

Currently, Mr. McCoy is the only employee on the WBAB property [5; 6]. Mr. McCoy is also the only resident residing at the property, located in the northwest corner of the property, approximately 100 ft west of an area of contamination [3, p. 5; 5]. There are no schools or day-care centers located within 200 ft of the property. An active Irving gasoline station is located 100 ft west and upgradient of the WBAB property [3, p. 11]. An estimated 168 people live within 1-radial mile of the property [14]. No terrestrial sensitive environments are located on the property [3].

According to the VT ANR report, an unknown volume of contaminated soil was excavated from the WBAB property in 1988 by an unknown party. However, soil samples collected by VT ANR on 22 July, 3 August, and 12 September 1988 in the vicinity of the soil excavation location document elevated concentrations of VOCs, including acetone, 2-butanone, methylene chloride, and toluene [1, p. 4]. Concentrations of detected substances, information regarding sampling depths, and methods used for analysis were not available in Vermont State files [1, p. 4].

START collected eight waste/source (soil) samples from the WBAB property on 24 and 25 November 1997. These waste/source samples were discussed in the waste/source section of this report; since these samples were collected from a depth of 0 to 2 ft bgs, they are also evaluated for potential soil exposure. Refer to Table 4 and Attachment A for the analytical results of waste/source (soil) samples collected by START from the WBAB property on 24 and 25 November 1997.

No VOCs were detected in soil samples collected from the WBAB property.

Three SVOCs were detected at the WBAB property. Di-n-butylphthalate was detected at 1,100  $\mu$ g/kg in sample SS-02. Sample SS-05, located within 200 ft of Mr. McCoy's on-site residence, was found to contain butylbenzyl phthalate at 460 micrograms per kilogram ( $\mu$ g/kg), and bis(2-ethylhexyl)phthalate at 460  $\mu$ g/kg [29 - 35]. Both substances are plasticizers, and are used in the production of flexible plastic parts commonly found in automobiles [40, p. 1; 41, p. 1].

Two pesticides and one PCB were also detected at the WBAB property. Methoxychlor was detected in sample SS-01 at 24  $\mu$ g/kg, and alpha-chlordane was detected at 3.5  $\mu$ g/kg, also in sample SS-01. Aroclor-1254 was detected at 76  $\mu$ g/kg in sample SS-08. PCBs are not known to have been used or stored on the WBAB property.

Three metals were detected in surficial soil samples collected from the WBAB property. All three were detected in samples SS-02, and SS-08 (replicate of SS-02). Barium was detected in sample SS-08 at 423  $\mu$ g/kg, lead was detected at 245 mg/kg (SS-08), and zinc was detected at 176 mg/kg (SS-08). Barium, zinc and lead were also detected in drinking water and surface water samples as well as in source/soil samples.

Based on the use of the property and proximity of the residence to sample SS-05, the on-site resident may have been impacted and a release of hazardous substances to surficial soil, at least

partially attributable to WBAB, has been documented. To date no known actions have been taken to address the release to soil.

#### AIR PATHWAY

Mr. McCoy, (the owner) is the only employee on the WBAB property [5, 6]. Mr. McCoy is also the only resident residing at the property, located in the northwest corner of the property.

The population within 4-radial miles of the property was estimated using equal distribution calculations of U.S. Census CENTRACTS data identifying population, households, and private water wells for "Block Groups" which lie wholly or in part within individual radial distance rings measured from potential sources on the property [14 p. 7-8]. There are an estimated 1,910 people who live within 4-radial miles of the WBAB property.

Table 13 summarizes the population within 4-radial miles of the WBAB property.

Table 13

Estimated Population Within 4-Radial Miles of West Burke Auto Body

Radial Distance From West Burke Auto Body (miles)	Estimated Population	
On-site	1	
> 0.00 to 0.25	12	
> 0.25 to 0.50	36	
> 0.50 to 1.00	120	
> 1.00 to 2.00	438	
> 2.00 to 3.00	<b>510</b>	
> 3.00 to 4.00	793	
TOTAL	1,910	

[14]

Note: On-site = one resident/employee.

There are approximately 800 acres of wetlands within 4-radial miles of the WBAB property [23-27]. There are two State-threatened species and one occurrence of a State-endangered species which utilize habitats within 4-radial miles of the WBAB property [38].

Table 14

Sensitive Environments Located Within 4-Radial Miles of West Burke Auto Body

Radial Distance from West Burke Auto Body (miles)	Sensitive Environment/Species (status)
> 0.00 to 0.25	Clean Water Act
	10 Acres of Wetlands
> 0.25 to 0.50	1 Acre of Wetland
> 0.50 to 1.00	32 Acres of Wetlands
	1 Habitat for State-threatened Species
	1 Habitat for State-endangered Species
> 1.00 to 2.00	91 Acres of Wetlands
> 2.00 to 3.00	1 Habitat for State-threatened Species
	295 Acres of wetlands
> 3.00 to 4.00	371 Acres of Wetlands
	2 Unique Biotic Communities

[23-27; 29; 38]

Based on a review of file information and observations made during the START on-site reconnaissance, no known qualitative laboratory air samples which are representative of ambient air have been collected at the WBAB property to date. For the purposes of this SI evaluation, air monitoring conducted by START personnel at the property are not considered representative of ambient air conditions. Based on available data, no release of hazardous substances to the ambient air from on-site sources is known or suspected to have occurred, and no impacts to nearby residential populations or sensitive environments are known or suspected.

#### SUMMARY

The West Burke Auto Body (WBAB) property is located along Route 5, Burke, Caledonia County, Vermont. Mr. Ray McCoy, owner of the property since 1965, operates a commercial auto body shop on the property. The WBAB property is bordered to the west by Route 5, to the north by a residence on a wooded plot, to the east by an unnamed stream and scrub-shrub and forested wetlands of West Branch Passumpsic River, and to the south by an unnamed intermittent stream and woodland. There are three buildings on the WBAB property, including an on-site residence, the WBAB garage, and a corrugated metal Quonset hut. No fence or security system restricts access to the property.

Prior to 1965, the WBAB property was a private residence and was owned by Ms. Leela Davis. On 30 April 1965, Mr. McCoy purchased the property from Ms. Davis and built a two-bay garage to be used as a commercial auto body shop. From 1965 to 1983, WBAB repaired 300 to 400 automobiles per year. In November 1987, Mr. McCoy leased half of the garage to Mr. Leon Turmel. Mr. Turmel used the space to operate his business, T-N-T Enterprises, an automobile repair business. Mr. Turmel relocated his business in July 1989. Operations at WBAB currently consist of buying automobiles at auctions and reselling them. Mr. McCoy also builds kit automobiles and stores them on the property. Since 1983, limited automobile body work has been performed on the property.

On 17 January 1989, Vermont Agency of Natural Resources (VT ANR) conducted a Preliminary Assessment (PA) of the WBAB property. The PA noted that waste paint, lacquer, paint thinner, and lacquer thinner were disposed of directly to the ground surface by dumping them through a garage window located on the east facing wall of the garage. At the time of the PA, wastes generated at the property included Speedy-Dri (used to clean up spills), batteries (sold to a Canadian business in Roch Island, Quebec), and scrap automobile parts. The PA also noted that waste oil had been disposed of to the ground surface outside of the garage bay door. According to Mr. McCoy, the oil had been spilled when he was helping a friend pull out an automobile engine. The PA noted that automobile batteries, were a potential source of contamination: however, no analytical evidence exists to confirm the presence of sulfuric acid contamination.

The PA indicated that there were piles of scrap automobile parts and possibly buried automobile parts to the east of the garage, near the West Branch Passumpsic River. The PA also noted that a dry well located beneath the Quonset hut was used to dispose of wastes, including paints, paint solvents, and waste oil. Currently, there is no information regarding the length of time wastes were disposed of into the dry well. Floor drains are located in each of the garage bays. The drains, which were covered at the time of the PA, are connected directly to the dry well underneath the Quonset hut. According to the PA, the dry well became clogged with paint material and failed. At the time of the Roy F. Weston, Inc. (WESTON®) Superfund Technical Assessment and Response Team (START) on-site reconnaissance on 6 June 1997, however, it was noted that the floor drains were uncovered.

START personnel conducted a Site Inspection (SI) sampling event on 24 and 25 November 1997 at the WBAB property. START personnel collected eight source/soil samples, six surface water samples, six sediment samples, and three drinking water samples. START samples were analyzed for volatile organic compounds (VOCs), semi-volatile organic compounds (SVOCs), pesticides/polychlorinated biphenyls (pest/PCBs), metals, and cyanide.

Analytical results for these samples indicated the presence of contaminants throughout the property. Multiple contaminants were found at the most upstream probable point of entry (PPE) area into the unnamed stream that flows through the wetland adjacent to the property. Sediment and surface water samples collected from this area indicated the presence of acetone, aluminum, barium, chromium, iron, lead, mercury, methylene chloride, and nickel among others. Concentrations ranged from 0.15 parts per billion (ppb) of mercury (SW-05), to 21,200 ppb of iron (SW-05).

START collected three groundwater samples from two drinking water wells as part of the WBAB property SI. The reference well is located off site, slightly upgradient, and approximately 50 feet from the northwest corner of the WBAB property. There were no VOCs, SVOCs, pesticides or PCBs detected in the reference well. However, a total of 13 inorganic elements were detected in the reference well, including cadmium  $(1.6 \,\mu\text{g/L})$ , chromium  $(1.7 \,\mu\text{g/L})$ , copper  $(343 \,\mu\text{g/L})$ , lead  $(15.2 \,\mu\text{g/L})$ , and zinc  $(59.6 \,\mu\text{g/L})$ . Only lead was detected above health based benchmarks: Vermont Groundwater Quality Standards,  $5.0 \,\mu\text{g/L}$ ; MCL (Maximum Concentration Limit),  $15.0 \,\mu\text{g/L}$ . While these substances may be partially attributable to processes performed at WBAB, it should also be noted that they are naturally occurring substances.

There were no VOCs, SVOCs, pesticides or PCBs detected in the WBAB well. However, there were eight inorganic elements detected in the WBAB well, including barium at 15.1  $\mu$ g/L (DW-01 and DW-02), copper at 28.8  $\mu$ g/L (DW-01) and 32.0  $\mu$ g/L (DW-02), and zinc at 9.9  $\mu$ g/L (DW-01) and 21.6  $\mu$ g/L (DW-02). No substances were detected above Vermont Groundwater Quality Standards, or MCLs. Barium is frequently used in many aspects of automobile manufacture and repair, including: the production of paints and enamels, as an additive in lubricating oils, engine rod bearings, and spark plugs. Copper is used extensively in the electrical wiring of automobiles. Zinc is used for galvanizing steel, and in paint. Barium and zinc were also detected in soil and surface water samples collected from the WBAB property. Although all three substances are naturally occurring, their presence could be partially attributable to the on-site repair and storage/disposal of automobiles and associated substances.

Waste/source/soil samples indicate the presence of bis(2-ethylhexyl)phthalate, selenium, manganese, di-n-butylphthalate, butylbenzylphthalate, alpha-chlordane, methoxychlor, and aroclor-1254. Butylbenzylphthalate at 460 ppb, and bis(2-ethylhexyl)phthalate at 460 ppb were detected at sample location SS-05, which is located within 200 feet of the on-site residence. Waste/source concentrations ranged from 3.5 ppb of alpha-Chlordane (SS-01), to 13,000 ppb of butylbenzyl phthalate (SS-02).

Based upon analytical results of samples from the WBAB property, groundwater, surface water and soil at the property have been impacted by a release of hazardous substances which appear to be at least partially attributable to on-site sources. One on-site resident, as well as two off-site residents may have been impacted via groundwater. Surface water concerns include a Clean Water Act (CWA)-protected water body, a fishery, and 0.1 miles of wetlands. The single on-site resident, (the property owner), may have been exposed to impacted soils. To date, no known actions have been taken to address the release to groundwater, surface water, or soil.

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SA97020029\whurkedft.wpd 24 February 2000

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## ATTACHMENT A

## WEST BURKE AUTO BODY

## SOURCE/SOIL SAMPLES START

Samples Collected 24 and 25 November 1997

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SITE: WEST BURKE AUTO BODY CASE: 25874 8DG: ANL40

## TABLE 1 VOLATILE SOIL ANALYSIS - LOW LEVEL pg/kg

LABORATORY: COMPUCHEM ENV. CORP.

SAMPLE NUMBER: SAMPLE LOCATION: LABORATORY NUMBER:		ANL40 SS-01 876134	ANL41 SS 02 876143	ANL42 SS-03 876144	ANL43 SS-04 876147	ANL44 SS-05 B76148	ANL45 SS-06 876151
COMPOUND	CRQL						
Chloromethana	10	12 U	14 U	10 U	14 U 14 U	14 U 14 U	13 U 13 U
Bromomelhane	10	12 U	14 U	10 U 10 U	14 U	14 U	13 U
Vinyi Chloride	10	12 U	14 U	10 U	14 U	14 U	13 U
Chloroethane	10	12 U	14 U 14 U	10 U	14 U	16 U	13 U
Methylene Chloride	10	22 U	14 U 14 UJ	10 UJ	14 UJ	14 ÚJ	13 0.7
Acetone	10	21 U 12 UJ	14 UJ 14 UJ	10 UJ	14 UJ	14 UJ	13 U
Carbon Disulfide	10	12 U	14 U	10 U	14 U	14 Ü	13 U
1,1-Dichloroethene	10	12 U 12 U	14 U	10 U	14 Ŭ	14 Ū	13 U
1,1-Dichloroethane	10	12 U	14 U	10 V	14 Ü	14 Ü	13 U
1,2-Dichloroethene (Total)	10 10	12 U	14 U	10 V	14 Ü	14 U	13 U
Chloroform	10	12 UJ	14 UJ	เด็กา	14 UJ	14 UJ	13 U
1,2-Dichloroethane	10	12 U	14 U	10 17	14 U	14 U	13 UJ
2-Bulanone	10	12 Ŭ	14 Ü	10 U	14 U	14 U	13 U
1,1,1-Trichloroethane Carbon Tetrachloride	10	12 Ü	14 U	10 U	14 U	14 U	13 U
Bromodichloromethane	10	12 U	14 U	10 V	14 U	14 U	13 U
1,2-Dichloropropane	10	12 U	14 U	10 D	14 U	14 U	13 U
cis-1,3-Dichloropropene	10	12 U	14 U	10 JJ	14 U	14 U	13 U
Trichloroelhene	10	12 U	14 U	10 U	14 U	14 U	13 U
Dibromochloromethane	10	12 U	14 U	10 U	14 U	14 U	13 U
1.1.2-Trichloroethane	10	12 U	14 IJ	10 U	14 U	14 U	13 U
Benzene	10	12 U	14 U	10 UJ	14 U	14 U	13 U
trans-1,3-Dichloropropene	10	12 U	14 U	10 U	14 U	14 U	13 U
Branyoform	10	12 U	14 U	10 U	14 U	14 U	13 UJ
4-Methyl-2-pentanone	10	12 U	14 U	10 U	14 U	14 U	13 UJ
2-Hexanone	10	12 U	14 U	10 V	14 U	14 U	13 UJ
Tetrachloroethene	10	12 U	14 U	10 N	14 U	14 U	13 U
1,1,2,2-Teirachtoroethane	10	12 U	14 U	10 U	14 U	14 U	13 UJ
Toluene	10	12 U	14 U	10 U	14 U	14 U	13 U
Chlorobenzene	10	12 U	14 U	10 U	14 U	14 U	13 U
Ethylbenzene	10	12 U	14 U	10 U	14 U	14 U	13 U
Styrene	10	12 U	14 U	10 U	14 U	14 U	13 U
Xylene (total)	10	12 U	14 U	10 U	14 U	14 U	13 U
DILUTION FACTOR:		1.0	1.0	1.0	1.0	1.0	1.0
DATE SAMPLED:		11/24/97	11/24/97	11/24/97	11/24/97	11/24/97	11/24/97
DATE ANALYZED:		12/02/97	12/02/97	12/02/97	12/02/97	12/02/97	12/03/97
% MOISTURE:		19	28	4	30	27	24

NOTE: RESULTS ARE REPORTED ON A DRY WEIGHT BASIS.

#### SITE: WEST BURKE AUTO BODY CASE: 25874 SDG: ANL40

LABORATORY: COMPUCHEM ENV. CORP.

#### TABLE 1 **VOLATILE SOIL ANALYSIS - LOW LEVEL** µg/kg

SAMPLE NUMBER: SAMPLE LOCATION: LABORATORY NUMBER:		ANL73 SS-08 876152	
OMPOUND	CRQL		
hloromethane	10	14 U	
romomelhane	10	14 U	
Invi Chloride	10	14 U	
hioroethane	10	14 U	
lemylene Chloride	10	27 U	
Acelone	10	14 UJ	
Carbon Disulfide	10	14 UJ	
,1-Dichloroethene	10	14 U	
,1-Dichlorosthane	10	14 U	
,2-Dichloroethene (Total)	10	14 U	
,z-Dictioroaniere ( roter)	10	14 U	
, norosom , 2-Dichloroeth <b>ane</b>	10	14 UJ	
:-Bulanone	10	14 U	
:-poumone  ,1,1-Trichloroethene	10	14 U	
Carbon Tetrachioride	10	14 U	
Promodichloromethane	10	14 U	
2-Dichleropropane	10	14 U	
;a-1,3-Dichlaropropana	10	14 U	
	10	14 U	
Trichloroethene	10	14 U	
Dibromochloromethane	10	14 U	
1,1,2-Trichloroethene	10	14 U	
Benzene	10	14 U	
rans-1,3-Dichloroprope <del>ne</del>	10	14 U	
Bramaform	10	14 U	
(-Methyl-2-penisnone	10	14 U	
2-Hexanone	10	14 Ü	
Tetrachiorosithens	10	14 Ŭ	
1,1,2,2-Tetrachloroethane	10	14 Ŭ	
Toluene	10	14 U	
Chiorobenzene	10	14 Ü	
Ethylbenzene	10	14 U	
Styrene	• -	14 U	
Xylene (lotel)	10	17 0	
DILUTION FACTOR:		1.0	
DATE SAMPLED:		11/24/97	
DATE SAMPLED.		12/02/97	
ØATE ANALTZEU. % MOISTURE:		29	

NOTE: RESULTS ARE REPORTED ON A DRY WEIGHT BASIS.

#### TABLE 2 SEMIVOLATILE SOIL ANALYSIS 110/fig

SITE: WEST BURKE AUTO BODY CASE: 25874 SDG: ANLAD LABORATORY: COMPUCHEM ENV. CORP.

SA	AMPLE NUMBER: MPLE LOCATION: ATORY NUMBER:	ANL40 SS-01 876134	ANL41 SS-02 876143	ANL42 SS-03 876144	ANL43 SS-04 876147	ANL44 SS-05 876148	ANL45 SS-06 878151
COMPOUND	CRQL						
Phenoi	330	410 UJ	460 UJ	R	470 UJ	450 UJ	430 UJ
bis(2-Chioroethyl) ether	330	410 U.\$	460 UJ	R	470 UJ	450 UJ	430 UJ
2-Chlorophenol	330	410 UJ	480 U.I	R	470 UJ	450 UJ	430 LU
1,3-Dichlorobenzene	330	410 UJ 410 UJ	460 UJ 460 UJ	R R	470 UJ 470 UJ	450 UJ 450 UJ	430 UJ 430 UJ
1,4-Dichlorobenzene 1,2-Dichlorobenzene	330 330	410 UJ	460 UJ	Ŕ	470 U.I	450 UJ	430 UJ
2-Methylphenol	330	410 UJ	460 UJ	R	470 UJ	450 UJ	430 123
2,2'-Oxypia(1-chioropropane)	•	410 UJ	480 UJ	R	470 UJ	450 UJ	430 W
4-Methylphenol	330	410 UJ	480 LLI	R	470 UJ	450 UJ	430 UJ
N-Nitroso-di-n-propylamine	330	410 UJ	460 UJ	R	470 UJ	450 UJ	430 UJ
Hexachloroethane	330 330	410 UJ 410 UJ	480 UJ 480 UJ	R R	470 UJ 470 UJ	450 UJ 450 UJ	430 UJ 430 UJ
Nitropenzene Lsophorone	330	410 UJ	480 UJ	R	470 UJ	450 UJ	430 UJ
2-Nitrophenol	330	410 01	460 UJ	 R	470 UJ	450 UJ	430 UJ
2,4-Dimetry(phenol	330	410 UJ	480 UJ	R	470 UJ	450 UJ	430 UJ
bis(2-Chloroethoxy)methane	330	410 UJ	460 UJ	R	470 UJ	450 UJ	430 UJ
2.4-Dichloropnenol	330	410 UJ	460 UJ	R	470 UJ	450 UJ	430 UJ
1.2,4-Trichlorobenzene	330	410 UJ	480 UJ	R R	470 UJ 470 UJ	450 UJ 450 UJ	430 UJ 430 UJ
Naphthalene	330 330	410 UJ 410 UJ	460 UJ 460 UJ	R R	470 UJ	450 U.1	430 UJ
4-Chlorosnkine Hexachlorobutsdiene	330	410 UJ	460 UJ	Ř	470 UJ	450 UJ	430 UJ
4-Chioro-3-methylonenol	330	410 UJ	460 LtJ	R	470 UJ	450 UJ	430 UJ
2-Metny:naphthelene	330	410 UJ	460 UJ	R	470 UJ	460 UJ	430 UJ
Hexachiorocyclopentadiene	330	410 UJ	460 UJ	R	470 UJ	450 UJ	430 UJ
2,4,5-Trichlorophenol	330	410 U.J	450 UJ	R R	470 UJ 1200 UJ	450 UJ 1100 UJ	עט 1100 1100 אן
2,4,5-Trichiorophenol	530 330	1806 UJ 410 UJ	1200 UJ 460 UJ	R R	470 UJ	450 UJ	430 UJ
2-Chloronaphtháiene 2-Nitroaniline	830	1000 UJ	1200 UJ	Ŕ	1200 UJ	1100 UJ	1100 UJ
Dimethylphthalate	330	410 UJ	460 UJ	R	470 UJ	450 UJ	430 UJ
Acenspothylene	330	410 UJ	460 UJ	R	470 UJ	450 LT	430 UJ
2.5-Dimirotoluene	330	410 UJ	460 UJ	R	470 UJ	450 UJ	430 UJ
3-Nitroansine	830	1000 UJ	1200 UJ	R R	1200 UJ 470 UJ	1100 UJ 450 UJ	1100 UJ 430 UJ
Acenaphtnene	330 830	410 UJ 1 <b>00</b> 0 UJ	460 UJ 1200 UJ	Ŕ	1200 UJ	1100 UJ	1100 UJ
2.4-Qintrophenol 4-Nitrophenol	830	1000 UJ	1200 UJ	Ŕ	1200 UJ	1100 UJ	1100 UJ
Dipenzoluran	330	410 UJ	460 UJ	Ř	470 UJ	450 UJ	430 UJ
2.4-Dinkrotoiuene	330	410 UJ	460 UJ	R	470 UJ	450 UJ	430 UJ
Diethylphthalate	330	410 UJ	460 UJ	R	470 UJ	450 UJ	430 UJ
Chlorophenyl-phenylether	330	410 UJ	460 🖽	R R	470 UJ 470 UJ	450 UJ 450 UJ	430 UJ 430 UJ
Fluorene	330 830	410 UJ 1000 UJ	460 UJ 1200 UJ	R	1200 UJ	1100 UJ	1100 UJ
4-Nitroaniline 4,5-Dinkro-2-methylphenol	830	1000 UJ	1200 UJ	Ř	1200 UJ	1100 UJ	1100 UJ
N-Nitrosodiphenyiamine(1)	330	410 UJ	450 UJ	R	470 UJ	450 UJ	430 UJ
4-Bromopheny-phenylether	330	410 UJ	460 LLJ	R	470 UJ	450 UJ	430 UJ
Hexachiorobenzena	330	410 UJ	460 UJ	R	470 UJ	450 UJ	430 UJ
Pentachiorophenol	836	1000 UJ	1200 UJ	R R	1200 UJ 470 UJ	1100 UJ 450 UJ	1100 UJ 430 UJ
Phenanthrene	330 330	410 UJ 410 UJ	460 UJ 460 UJ	R	470 UJ	450 UJ	430 UJ
Anthracene Carbazole	330	410 UJ	480 U.i	R R	470 UJ	450 UJ	430 UJ
Ci-n-butytphthalate	330	410 UJ	1100 J	Ř	470 UJ	84 J	430 UJ
Fluoranthene	330	410 UJ	460 UJ	R	470 UJ	460 UJ	430 UJ
Pyrene	330	410 UJ	460 UJ	R	470 UJ	450 UJ	430 UJ
Butylpenzylphthalate	330	410 UJ	*13000 J	R R	470 UJ 470 UJ	480 J 450 UJ	94 J 430 UJ
3.3'-Dichlorobenzidine	330 330	410 UJ 410 UJ	460 UJ 460 UJ	R	470 UJ	450 UJ	430 UJ
Benzo(a)anthracens Chrysens	230	410 UJ	450 UJ	R	470 UJ	450 UJ	430 UJ
But (2-ethylhexyl)phthaiate	330	120 J EB	480 UJ	R	470 UJ	460 J	56 J EB
Di-n-octy/phthalate	230	410 U3	460 UJ	R	470 UJ	450 UJ	430 UJ
Benzo(b)fluoranthene	330	410 UJ	460 UJ	R	470 LU	450 UJ	430 UJ
Benzo(k)fluorenthene	330 330	410 UJ 410 UJ	460 UJ 460 UJ	R R	470 UJ 470 UJ	450 UJ 450 UJ	430 UJ 430 UJ
Benzolajpyrene Indepola 3 3-cd/m/mee	330 330	410 W	460 U.S	R	470 UJ	450 UJ	430 UJ
Indena(1,2,3-cd)pyrana Dibenz(a,h)anthracene	330	410 UJ	460 UJ	R	470 UJ	450 UJ	430 UJ
Benzo(g.h.i)perylane	330	410 UJ	460 UJ	R	470 UJ	450 UJ	430 UJ
	NILLITION SAPTOD	1,0	1,0/10,0	1,0	1.0	1.0	1.0
	DILUTION FACTOR: DATE SAMPLED:	11/24/97	11/24/97	11/24/97	11/24/97	11/24/97	11/24/97
1	DATE EXTRACTED:	12/17/97	12/17/97	12/24/97	12/17/97	12/17/97	12/17/97
	DATE ANALYZED:	12/20/97	12/20/97	12/29/97	12/20/97	12/20/97	12/20/97
	% MOISTURE:	18	28	4	30	27	24

NOTE RESULTS REPORTED ON A DRY WEIGHT BASIS. \*RESULT REPORTED FROM DILUTED ANALYSIS.

## TABLE 2 SEMIVOLATILE SOIL ANALYSIS **10/16**

ANL73 SAMPLE NUMBER:

SITE: WEST BURKE AUTO BODY CASE: 25874 SDG: ANL40 LABORATORY: COMPUCHEM ENV. CORP.

	MPLE LOCATION:		SS-06
	ATORY NUMBER:		876152
COMPOUND		CROL	
			R
Phenol		330 330	R
bis(2-Chloroethyl) ether 2-Chlorophenol		330	Ř
1,3-Dichiombanzana		330	R
1,4-Dichlorobenzene		330	R
1,2-Dichioropenzene		330	R
2-Methylphenol		330	R
2.2'-Oxybis(1-chloropropene)	l	330 330	R R
4-Methylphenoi		330	Ŕ
N-Hitroso-di-n-propytamine Hexacttoroettisne		330	Ř
Nitropenzene		330	R
Isophorone		330	R
2-Nitrophenoi		330	Ŕ
2.4-Dimethylphenol		330	R R
bis(2-Chioroethoxy)methane		330 330	R
2,4-Dichiorophenol 1,2,4-Thonioropenzene		330	R
Naphthalené		330	R
4-Chlorografiline		330	Ŕ
Hexachlorobytediene		330	Ŗ
4-Chloro-3-methylphenol		330	R
2-Methylnaphthalene		330 330	R R
Hexachiprocyclopentadiene		330	R
2.4.5-Trichiorophenol 2.4.5-Trichiorophenol		830	R
2-Chioronaphthaiene		330	R
2-Nitroaniine		830	R
Denethylphthalate		330	R
Acensonthylene		330	<b>R</b>
2,5-Dinitrotoluene		330 830	Ř
3-Nitroaniine		330	Ř
Acenaphthene 2,4-Dinitrophenol		620	R
4-Nitrophenoi		830	R
Dibenzoturan		330	Ŕ
2,4-Dinerotoluene		330	R
Diethylonthalate		330 330	R R
4-Chlorophenyl-phenylether	,	330	Ř
Fluorene 4-Nitroaniline		830	R
4.6-Dinitro-2-methylpnenol		830	R
N-Nitrosodiphenylamine(1)		330	Ŗ
4-Bromopheny-phenysether	•	330	문
Hexachiorobenzene		330	R R
Pentachiorophenol		\$30 330	R
Phenanthrena		330	Ŕ
Anthracene Carbazole		330	R
Di-n-outylonmalate		330	1300 J
Fluoranthene		330	R
Pyrens		330	R
Sutyibenzyiphthalate		330 330	*6006J R
3,3'-Dichlorobenzidine		330	Ŕ
Benzo(a)anthracene Chrysene		330	Ř
Bis(2-emythexyl)phthalate		330	500 J EB
Di-n-octy/phthalate		230	56 J
Benzo(b)fluoranthene		330	R
Berizo(k)fluoranthene		330 330	R R
Benzo(a)pyrene		330	R
Indeno(1,2,3-cd)pyrene Diberz(a,h)anthracene		336	Ř
Benzo(g.h,i)parylane		330	表
	DILUTION FACTOR:		1,0/2,0
	DATE SAMPLED: DATE EXTRACTED:		11/24/97 12/23/97
	DATE ANALYZED:		12/29/67
	W MOISTURE:		29

NOTE RESULTS REPORTED ON A DRY WEIGHT BASIS.

TRESULT REPORTED FROM DILUTED ANALYSIS.

SITE: WEST BURKE AUTO BODY SDG: ANL40

CASE: 25874 LABORATORY: COMPUCHEM ENV. CORP.

TABLE 3 PESTICIDE/POLYCHLORINATED BIPHENYL SOIL ANALYSIS μg/kg

ANL44 ANL45 ANL43 ANL42 ANL41 AN1.40 SAMPLE NUMBER: SS-05 SS-08 SS-03 SS-04 SS-02 SS-01 SAMPLE LOCATION: 876151 876148 876144 876147 876143 876134 LABORATORY NUMBER: CRQL COMPOUND 2.2 U 2.3 U 2.4 U 2.4 U 1.8 UJ 2.1 U 1.7 alpha-BHC 2.3 U 2.2 U 2.4 U 1.8 UJ 2.1 U 2.4 U 1.7 bela-BHC 2.3 U 2.2 U 1.8 UJ 2.4 U 2.4 U R 1.7 delta-BHC 2.2 U 2.3 U 2.4 U 1.8 UJ 2.4 U 1.7 2.1 U gamma-BHC (Lindane) 2.2 U 2.3 U 2.4 U 2.4 U 0.14 J 0.15 J1.7 **Heptachlor** 2.2 U 2.3 U 2.4 U 1.8 UJ 24 U 2.1 U 1.7 2.2 U Aldrin 2.3 U 2.4 U 1.8 UJ 2.4 U 0.64 J 1.7 **Heptachlor Epoxide** 2.2 U 2.4 U 2.3 U 1.8 UJ 2.4 U 2.1 U 1.7 Endosulan I 4.5 U 4.3 U 4.7 U 0.27 J 4.6 U 4.1 U 3.3 4.3 U Dieldrin 4.5 U 4.7 U 3.4 UJ 41 U 4.6 U 3.3 4.3 U 4.4'-DDE 4.5 U 0.20 J 4.7 U 4.6 U 4.1 U 3.3 4.3 U **Endrin** 4.5 U 4.7 U 3.4 UJ 4.6 U R 3.3 Endosulfan II. 4.3 U 4.5 U 4.7 U 3.4 UJ 4.1 U 4.6 U 3.3 4.4'-DDD 4.5 U 4.3 U 4.7 U 3.4 UJ 4.6 U 3.3 4 1 U Endosulfan Sulfate 4.3 U 4.5 U 34 UJ 4.7 U R 1.2 J 3.3 22 U 4.4'-DDT 24 U 23 U 18 UJ 24 U 24 17 Methoxychlor 4.5 U 4.3 U 4.7 U 3.4 UJ 4.6 U 4.1 U 3.3 Endrin Kelone 4.5 U 4.3 U 4.7 U 3.4 UJ 4.6 U 4.1 U 3.3 2.2 U Endrin Aldehyde 2.3 U 1.8 UJ 2.4 U 2.4 U 3.5 1.7 2.2 U alpha-Chlordane 0.24 J 2.4 U 2.4 U 1.8 UJ 2.1 U 1.7 gamma-Chlordane 220 U 230 U 240 U 180 UJ 240 U 210 U 170 43 U Toxaphene 45 U 34 UJ 47 U 46 U 33 41 U Aroclor-1016 92 U 88 U 95 U 93 U 70 UJ 83 U 67 43 U Arockor-1221 45 U 47 U 34 UJ 46 U 41 U 33 Aroclor-1232 43 U 45 U 34 UJ 47 U 46 U 33 41 U Aroclor-1242 43 U 45 U 47 U 48 U 34 UJ 41 U 33 Aroclor-1248 43 U 47 U 45 U 34 UJ 46 U 41 U 33 Arodor-1254 43 U 45 U 47 U 34 UJ 46 U 33 41 U Araclor-1260 1.0 1.0 1.0 1.0 1.0 1.0 DILUTION FACTOR: 11/24/97 11/24/97 11/24/97 11/24/97 11/24/97 11/24/97 DATE SAMPLED:

12/01/97

12/18/97

19

NOTE: RESULTS ARE REPORTED ON A DRY WEIGHT BASIS.

12/01/97

12/18/97

28

12/15/97

12/19/97

4

12/01/97

12/18/97

24

12/01/97

12/18/97

27

12/01/97

12/18/97

30

DATE EXTRACTED:

DATE ANALYZED:

% MOISTURE:

SITE: WEST BURKE AUTO BODY

CASE: 25874 SDG: ANL40

LABORATORY: COMPUCHEM ENV. CORP.

#### TABLE 3 PESTICIDE/POLYCHLORINATED BIPHENYL SOIL ANALYSIS μ**g**/kg

SAMPLE NUMBER:	
SAMPLE LOCATION:	
LARORATORY NUMBER:	

ANL73 SS-08 876152

COMPOUND	CRQL	
alpha-BHC	1.7	2.4 U
beta-BHC	1.7	2.4 U
detta-BHC	1.7	2.4 U
gamma-BHC (Lindane)	1.7	2.4 U
Heptachior	1.7	2.4 U
Aldrin	1.7	2.4 U
Heptachlor Epoxide	1.7	2.4 U
Endosulian I	1.7	2.4 U
Diekdrin	3.3	4,6 U
4.4'-DDE	3.3	4.6 U
Endrin	3.3	4.6 U
Endosulfan II	3.3	4.6 U
4.4'-DDD	3.3	4.6 U
Endosultan Suffate	3.3	4.6 U
4,4'-DDT	3.3	4.6 U
Methoxychlor	17	24 U
Endrin Kelone	3.3	4.6 U
Endrin Aldehyde	3.3	4.6 U
alpha-Chlordane	1.7	2.4 U
gemms-Chlordane	1.7	2.4 U
Toxaphene	170	240 U
Aroclor-1018	33	46 U
Aroclor-1221	67	94 U
Arodor-1232	33	48 U
Arodor-1242	33	46 U
Aroclor-1248	33	46 U
Aroclor-1254	33	76
Aroclor-1280	33	39 J

DILUTION FACTOR:	1.0
DATE SAMPLED:	11/24/97
DATE EXTRACTED:	12/01/97
DATE ANALYZED:	12/18/97
% MOISTURE:	29
10 101010101-	

NOTE: RESULTS ARE REPORTED ON A DRY WEIGHT BASIS.

SITE: WEST BURKE AUTO BODY

#### TABLE 1 INORGANIC SOIL ANALYSES mg/kg

SDG: MAKZ22 CASE: 25874 LABORATORY: SENTINEL, INC.

	·	MAKZ22 SS-01 08726S 81.9	MAKZ23 SS 02 08727S 71.5	MAKZ24 \$S-03 08728\$ 94.7	MAKZ25 SS-04 08729S 71.8	MAKZ26 SS-05 08730S 72.9	MAKZ27 SS-06 08731S 74.7	MAKZ28 \$S-07 08732\$ 72.7	MAKZ54 SS-08 08733S 72.1	
	DETECTION LIMITS							· · ··· ·		CONTRACT DETECTION LIMITS (mg/kg)
		15400	19600	6140	9660	20600	16900	16700	21200	40
-					1.3 UJ	1.3 UJ	1.3 UJ			12
5					2.1 J	5.5				2
P					16.6	73.6				40
B				0.32	0.49	0.75				1
г В				0.05 U	0.15 UJ	0.38 U		+		1000
5			3500 J	1310 J	879 UJ					1000
•				126	15.9					2
•	• • • •			4 3	4.5					10
þ		-	233 UJ	10.5 UJ	6 5 UJ					5 20
þ			21700	8420	14500					20 0.6
P			165 J	3.7 U	16.0 U					1000
p		3230	2050	2730						3
þ		279 J	201 J	175 J						0.1
•		0.06 J	0.0 <b>8</b> J	D.05 U						8
P		23.9	15.1	16 3			•			1000
è			877	1780						
p		0.56 U	0 64 U	D.49 U						
P		0.73 UJ	0.91 UJ	0.31 UJ	0 59 UJ					
, D	•		552	163 U	86.5 U		-			1000
6				0.61 U	0.81 U					2
6				12.1	26 3	33.5				10
•				20 5 UJ	28.4 UJ	108 UJ	41.3 UJ			4
•				011 13	0.27 U	0.25 U	1.2 U	NA .	0.91 U	0.5
	6 6 6 6 6 6 6 6 6 6 6 6 6 6 6 6 6 6 6	(mg/kg)  P 2.28 P 0.96 P 0.82 P 0.12 P 0.02 P 0.06 P 0.96 P 0.14 P 0.22 P 0.22 P 0.22 P 0.36 P 0.36 P 1.5 P 0.08 CV 0.05 P 0.26 P 2.8 P 0.46 P 0.16 P 18.6 P 0.58 P 0.58 P 0.58 P 0.58 P 0.58 P 0.16	SS-01 08726S 61.9  INSTRUMENT DETECTION LIMITS (mg/kg)  P 2.28 15800 P 0.96 1.2 UJ P 0.82 3.9 P 0.12 21.7 P 0.02 0.64 P 0.06 0.21 U P 0.96 1800 J P 0.14 21.3 P 0.22 8.1 P 0.22 8.1 P 0.22 8.1 P 0.22 131.6 UJ P 0.36 10.2 U P 2.36 16100 P 0.36 10.2 U P 2.36 16100 P 0.36 10.2 U P 1.5 3230 P 0.08 279 J CV 0.05 0.06 J P 0.26 23.9 P 0.28 801 P 0.46 0.56 U P 0.16 0.73 UJ P 18.6 229 U P 0.58 0.71 U P 0.28 14.0	SS-01 SS-02 08727S 61.9 71.5  INSTRUMENT DETECTION LIMITS (mg/kg)  P 2.28 15800 19600 P 0.96 1.2 UJ 1.3 UJ 1.3 UJ P 0.82 3.9 4.1 P 0.12 21.7 318 P 0.02 0.64 0.81 P 0.06 0.21 U 1.3 U P 0.96 1800 J 3500 J P 0.96 1800 J 3500 J P 0.14 21.3 30.8 P 0.22 8.1 5.8 P 0.25 8.1 5.8 P 0.26 23.9 15.1 P 0.36 10.2 U 165 J 0.06 J 0.	SS-01 SS 02 SS-03 08728S 61.9 71.5 94.7  INSTRUMENT DETECTION LIMITS (mg/kg)  P 2.28 15500 19600 5140 1.0 UJ 1.0 U	SS-01 SS-02 SS-03 SS-04 08726S 08726S 08726S 08727S 08728S 08729S 61.9 71.5 94.7 71.8  INSTRUMENT DETECTION LIMITS (mg/kg)  P 2.28 15800 19600 6140 9660 P 0.96 1.2 UJ 1.3 UJ 1.0 UJ 1.3 UJ P 0.82 3.9 41 2.5 2.1 J P 0.12 21.7 318 27.9 16.6 P 0.02 0.64 0.81 0.32 0.49 P 0.06 0.21 U 1.3 U 0.06 U 0.15 UJ P 0.96 1800 J 3500 J 1310 J 879 UJ P 0.96 1800 J 3500 J 1310 J 879 UJ P 0.14 21.3 30.8 12.6 15.9 P 0.22 8.1 5.8 43 4.5 P 0.22 8.1 5.8 43 4.5 P 0.22 31.6 UJ 233 UJ 10.5 UJ 8.5 UJ P 2.36 16100 21700 8420 14500 P 2.36 16100 21700 8420 14500 P 0.36 10.2 U 1.65 J 3.7 U 1.60 U 1.60 U 1.5 UJ 1.5	SS-01   SS-02   SS-03   SS-04   SS-05	SS 01   SS 02   SS 03   SS 04   SS 05   O8726S   O8726S   O8727S   O8728S   O8728S   O8728S   O8730S   O8731S	MARZEZ   M	MARZ22

ANALYTICAL METHOD NOTE: P - ICP CV - COLD VAPOR CA - MIDI-DISTILLATION SPECTROPHOTOMETRIC	J - U - U J - R - NA -	QUANTITATION IS ESTIMATED DUE TO LIMITATIONS IDENTIFIED IN THE QUALITY CONTROL REVIEW (DATA REVIEW).  VALUE IS NON-DETECTED.  VALUE IS NON-DETECTED AND DETECTION LIMIT IS ESTIMATED.  VALUE IS REJECTED:  NOT ANALYZED
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**RESULTS ARE REPORTED ON A DRY WEIGHT BASIS** 

## ATTACHMENT B

### WEST BURKE AUTO BODY

## SURFACE WATER/DRINKING WATER SAMPLES START

Samples Collected 24 and 25 November 1997

### SITE: WEST BURKE AUTO BODY

## TABLE 1 VOLATILE AQUEOUS ANALYSIS pg/L

CASE: 25874 SDG: ANL46 LABORATORY: COMPUCHEM ENV. CORP.

	SAMPLE NUMBER: SAMPLE LOCATION: SRATORY NUMBER:	ANL50 RB-02 876119	ANL52 TB-02 876124	ANL53 SW-01 B76125	ANL54 SW-02 876126	ANL55 SW-03 876127	ANL58 SW-04 876128
COMPOUND	CRO	L		,			
Chloromethana	10	10 UJ	10 UJ	10 UJ	10 UJ	10 UJ	10 UJ 10 U
Bromomethane	10	10 U	10 U	10 U	10 U	10 U	10 U
Vinyl Chloride	10	10 U	10 U	10 U	10 U	10 U	10 U
Chloroethane	10	10 U	10 U	10 U	10 U	10 U 10 U	10 U
Methylene Chloride	10	10 U	1 J	10 U	10 U		10 U
Acelone	10	10 U	10 U	10 U	10 U	10 U 10 UJ	10 01
Carbon Disulfide	10	10 UJ	10 UJ	10 UJ	10 UJ	10 UJ	10 U
1.1-Dichloroethene	10	10 U	10 U	10 U	10 U 10 U	10 U	10 U
1,1-Dichloroethane	10	10 U	10 U	10 Ú	10 U	10 U	10 U
1,2-Dichloroethene (Total)	10	10 U	10 U	10 U	10 U	10 U	10 Ŭ
Chloroform	10	10 U	10 U	10 U 10 U	10 U	10 U	10 U
1.2-Dichloroethane	10	10 U	10 U	10 U	10 V	10 U	10 U
2-Butanone	10	10 U	10 U	10 D	10 U	10 U	10 U
1,1,1-Trichlorosthans	10	10 U	10 U 10 U	10 U	10 U	10 U	10 U
Carbon Tetrachlorida	10	10 U 10 U	10 U	10 U	10 U	10 U	10 U
Bromodichloromethane	10 10	10 U	10 U	10 U	10 U	10 U	10 U
1,2-Dichloropropene	10	· · · · · · · · · · · · · · · · · · ·	10 U				
cia-1,3-Dichleropropene	10		10 U				
Trichloroethene	10		10 U	10 U	10 U	1D U	10 U 10 U
Dibromochloromathana 1,1,2-Trichloroathana	10	10 U	10 U	10 U	10 U	10 U 10 U	10 U
1,1,2-11)Cuologuiano Benzene	10	10 U	10 U	10 U	10 U 10 U	10 U	10 0
trans-1,3-Dichloropropens	10		10 U				
Bromoform	10		10 U	10 U 10 U	10 U	10 U	10 U
4-Melhyl-2-pentanons	10		10 U				
2-Hexanone	10		10 U				
Tetrachtoroethere	10		10 U 10 U	1D U	10 U	10 U	10 U
1,1,2,2-Tetrachioroethane	10		10 U				
Toluena	10		10 U				
Chłorobenzene	10		10 U				
Ethylbenzene	10		10 U				
Styrene	10		10 U	10 U	10 U	10 Ū	10 U
Xylene (total)	10	10 U	IV U	10 0	,		
	DILUTION FACTOR:	1.0	1.0	1.0	1.0	1.0	1.0
	DATE SAMPLED:	11/24/97	11/24/97	11/24/97	11/25/97	11/25/97	11/25/97
	DATE ANALYZED:	12/02/97	12/02/97	12/02/97	12/02/97	12/02/97	12/02/97

SITE: WEST BURKE AUTO BODY CASE: 25874 SDG: ANL45

#### TABLE 1 **VOLATILE AQUEOUS ANALYSIS** µg/L

LABORATORY: COMPUCHEM ENV. CORP.

SAMPLE NUMBER: SAMPLE LOCATION: LABORATORY NUMBER:		ANL57 SW-05 876129	ANL58 SW-06 876130
COMPOUND	CRQL		
Chloromethane	10	10 UJ	10 UJ 10 U
Bromomethane	10	10 U	10 U
Vinyl Chlorida	10	10 U	10 U
Chloroethane	10	10 U	10 U
Methylene Chloride	10	10 U	10 U
Acatona	10	10 J	10 UJ
Carbon Disulfide	10	10 UJ	10 U
1,1-Dichloroethene	10	10 U	10 U
1,1-Dichtoroethane	10	10 U	10 U
1,2-Dichloroethene (Total)	10	10 U	10 U
Chloroform	10	10 U	10 U
1,2-Dichloroelhane	10	10 U	10 U
2-Bulanone	10	10 U	10 U
1,1,1-Trichloroethane	10	10 U	10 U
Carbon Tetrachloride	10	10 U	10 U
Bromodichloromethane	10	10 U 10 U	10 U
1,2-Dichloropropene	10	10 U	10 U
cls-1,3-Dichloropropene	10	10 U	10 Ü
Trichloroethene	10 10	10 U	10 U
Dibromochloromethene	10 10	10 U	10 U
1,1,2-Trichloroethane	10	10 U	10 D
Benzene	10	10 Ŭ	10 U
trans-1,3-Dichioropropene	10	10 U	10 U
Bromoform	10	10 0	10 U
4-Methyl-2-pentanone	10	10 U	10 U
2-Hexanona	10	10 U	10 U
Tetrachloroethene	10	10 U	10 U
1,1,2,2-Tetrachioroethane	10	10 U	10 U
Toluene	10	10 U	10 U
Chlorobenzene	10	10 U	10 ป
Elhylbenzen●	10	10 U	10 U
Styrana	10	10 U	10 U
Xylene (total)	ĮŪ	<b>,</b> -	
DILUTION FACTOR:		1.0	1.0
DATE SAMPLED:		11/25/97	11/25/97
DATE ANALYZED:		12/02/97	12/02/97

## TABLE 1 VOC Modified Method 524.2 Water Analyses µg/L

SITE: West Burke Auto Body CASE: DAS 0102F SDG: DAFH13 LABORATORY: EAS Laboratories

SAMPLE NUMBER: SAMPLE LOGATION: LABORATORY NUMBER:		DAFH13 DW-01 9709601A	DAFH14 DW-02 9709802	DAFH15 DW-03 9709803	CAFH18 18-03 9709804
COMPOUND	CROL				
Dichlorodifluoromethane Chloromethane	1.0 1.0	1.0 U 1.0 U 1.0 U	1.0 U 1.0 U	1,013 1,013 1,013	1.0U 1.0U 1.0U
Vinys Chianae	1,0 1,0	1.0U 1.0U	1,6U 1,0U	1.00	1.00
Bromomethane Chlorostnane	1.0	1.0 U	1.0 U	1.0 U	1.DU
Trichloromethana	1.0	1.00	1.00	1.0 U	1.0U
Acatone	5.0	<u>\$.</u> 0U	5.0 U	5.0 U	5.0 U
2-Buttanone	5.0 5.0	5.0 U 5.0 U	5.0U 5.0U	\$.0U 5.0U	5.0U 2.7 J
Tetrahydrofuran	5.0	5.0U	5.0 U	5.0 U	5.0 U
4-Methyl-2-Pentanone 2-Hecanone	5.0	\$.01	5.0 U	5.0 U	5.0 U
1,1-Dichloroethane	1.0	1.0 U	1.0 ()	1.0 U	1,01
Methylene Chiqnae	1,0	1.0 U	1.00	1.0 U	0.7 J
Caroon Disulfide	1.9 1.0	1.0 U 1.0 U	1.0 U 1.0 U	1.0U 1.0U	1.0 U 1.0 U
Trans-1.2-Dicatorosthere	1.0	1,0U	1.0U	1.0 U	1.0U
1,1-Dichloroethane 2,2-Dichloropropane	1.0	1.0 U	1.0 U	1,0 U	1.0 U
Cis-1.2-Dicatoroethene	1.0	1.0 Ú	1.0 U	1.0 U	1.00
Chicroform	1.0	1.0 U	t.ou	1.0 U	1.00
Bromochiorometriane	1.0	1.0 U	1.0 U	1.0 U	1.0 U 1.0 U
t,c,c-Thenloroethane	1.0 1.0	1.0 U 1.0 U	1.0 U 1.0 U	1,0 U 1,0 U	1.20
1,1-Dichloropropene Carbon Tetrachionde	1.0	1.0 U	1.0 U	1,00	1.00
1.2-Dichigroemane	1.0	1.0 U	1.0 U	1.0 U	1.0U
Senzene	1.0	1.0 U	1,01	1.0 U	1.00
Trichloroethene	1.0	1.0 U	1.00	1.00	1.0 U
1,2-Cichioropropane	1.0 1.0	1.0 U 1.0 U	1.0 U 1.0 U	1.0 U 1.0 U	1.0U 1.0U
Bromodichloromethane Dibromomethane	1.0	1.00	1,00	1.0 U	1.00
Cis-1,3-Dicnioropropene	1.0	1.0 U	1.0 U	1.0 U	1.0 U
Toluene	1.0	1,0 U	1.0 U	1.0 U	1.00
Trans-1,3-Dicnloropropene	1.0	1.0 U	1.00	1.0 U 1.0 U	1.0 U 1.0 U
1,1,2-Trichloroethane	1.0 1.0	1.0 U 1.0 U	1.0U 1.0U	1.00	1.00
1,3-Dichloropropane Terrachicroemene	1.0	1.00	1.00	1.00	1.0 U
Dibromochloromethane	1.0	1.0 U	1.0 U	1.0 U	1.00
1,2-Dibromoethane	1.0	1.0 U	1.0 U	1.0 U	1.00
Charasene	1.0	1.00	1.00	1.0 U 1.0 U	1,0 U 1,0 U
1,1,1,2-Tetrachloroethane	1.0 1.0	1.0 U 1.0 U	1.0 U 1.0 U	1.00	1.00
Ethylbenzene m/p-Xylene	1.0	1.00	1.00	1.00	1.00
o-Xylane	1.0	1.0 U	1.0 U	1.0 U	1.00
Styrene	1.0	1.0 U	1.0 U	1.00	1.00
<b>Brom</b> eform	1.0	1.00		1.0 U 1.0 U	1.0U 1.0U
isopropyibenzene	1.0 1.0	1.0 U 1.0 U		1.00	1.00
1,1,2,2-Tetrachioroethane 1,2,3-Trichioropropane	1.0	1,0 U		1.0 U	1.00
Bromopenzene	1.0	1.51		1.00	1.0 U
n-Propyibenzene	1.0	1.00		1.0 U	1.0 U
2-Chlorotoluene	1.0	1.0 U 1.0 U		1.0U 1.0U	1.0U 1.0U
1.3.5-Trimethylbenzene	1.0 1.0	1.00			1.00
4-Chioratolisene p-isopropyitoruene	1.0	1,01			
1,2,4-Trimethylbenzene	1.0	1.0 L			
sec-Butylbenzene	1,0	1.00			
tert-Butylbenzene	1.0	1.0 L 1.0 L			
1,3-Dichloropenzana	1.0 1.0	1.01			
1,4-Dichloropenzene n-Busylbenzene	1.0	1.01			
1,2-Dientoropenzane	1.0	1.0 (	J 1,0 U		
1-2-Oibromo-3-Chloropropane	1.0	1,01			
1,2,4-Trichioropenzene	1.0 1.0	1.0 t 1.0 t			
Hexachlorobutadiene Naphthalene	1.0	1.01			
1,2,3-Trichiorobenzene	1.0	1.0			
DILUTION FACTOR: DATE SAMPLED: DATE ANALYZED:		1.0 11 <i>/25/</i> 97 12/02/97	1.0 11/25/97 12/02/97	1,0 11/24/97 12/02/97	1.0 11/24/97 12/02/97

SITE: WEST BURKE AUTO BODY CASE: 25574 SDG: ANLAS LABORATORY: COMPUCHEM ENV. CORP.

#### TABLE 2 SEMIVOLATILE WATER ANALYSIS µg/L

SAMPLI	LE NUMBER: E LOCATION: RY NUMBER:	ANL48 DW-01 575112	ANL47 OW-02 878117	ANE.48 DW-03 876118	ANL50 R9-02 876119	ANL53 5W-01 676125	ANL54 SW-02 578128
COMPOUND	CRQL						
Phenoi	10	10 U	10 U	10 U	10 U	10 U	10 U
bis(2-Chloroethyl) ether	10	10 U	10 U	10 U	10 U	10 U	10 U
2-Chiorephanol	10	10 U	10 U	10 U 10 U	10 U 10 U	10 U 10 U	10 U 10 U
1,3-Dichlorobenzene	10 10	10 U 10 U	10 U 10 U	10 U	10 U	10 U	10 UJ
1,4-Oichlorobenzene 1,2-Oichlorobenzene	10	10 U	10 U	10 U	10 U	10 U	10 U
2-Methylphenol	10	10 U	10 ป	10 U	10 U	10 U	10 U
2.Z-Oxybis(1-chloropropane)	10	10 U	10 U	10 U	10 U	10 U	10 U
4-Methylphenoi	10	10 U	10 U	10 U	10 U .	10 U	10 U
N-Nitroso-di-n-propytamine	10	10 U	10 U	10 U	10 U	10 U 10 U	10 U
Hexachioroethane	10 10	to U 10 U	10 U 10 U	10 U 10 U	10 U	10 U	10 U
Mitrobenzene	10	10 U	10 U	10 U	10 U	10 U	10 U
isophorone 2-Nitrophenoi	10	10 U	10 U	10 U	10 U	10 U	10 U
2.4-Dimethyronenol	10	10 U	10 U	10 U	10 U	10 U	10 U
bis(2-Chloroethoxy)methene	10	10 U	10 U	10 U	10 U	10 U	10 ()
2,4-Dichlorophenol	ta	10 U	10 U	10 U	10 U	10 년 10 년	10 U 10 UJ
1.2.4-Trichloropenzana	10	10 U	10 U	10 U 10 U	10 U 10 U	10 U	10 U
Naphthalene	10	10 U 10 U	10 U 10 U	10 U	10 U	10 UJ	10 UJ
4-Chloroaniine	10 10	10 U	10 U	10 U	10 U	10 U	10 U
Hexachlorobutadiene 4-Chioro-3-methylphenol	10	10 U	10 U	10 U	10 U	10 U	10 Ü
2-Mathylnaphthalene	10	10 U	10 U	10 U	10 U	10 U	10 ប
Hexachiorocyclopentaciene	10	10 U	10 U	10 U	10 U	10 U	10 UJ
2,4,6-Trichlorophenol	70	10 U	10 U	ט פוז	10 U	10 U	10 ()
2,4 5-Trichterophenot -	25	25 U	25 U	25 U	25 U	25 U 10 U	25 U 10 U
2-Chioronaphthalene	10	10 U	10 U 25 U	10 U 25 U	10:↓ 25:∪	10 U	25 U
2-Nitroandine	25 10	25 ป 10 ป	10 U	10 U	25 U	10 U	10 U
Oimethyrphthalate	10	10 U	10 U	10 U	10 U	10 U	10 U
Acensonthylene 2,6-Dinitratatuene	10	10 U	10 U	10 U	10 U	10 U	10 U
3-Nitroaniline	25	25 U	25 UJ	25 UJ	25 UJ	25 UJ	25 UJ
Acenagnthene	10	10 U	10 U	1 <b>0</b> U	1 <b>0</b> U	10 U	10 UJ
2,4-Dinitrophenol	25	25 U	25 U	25 U	25 U	25 UJ	25 U
4-Nitropnenol	<b>25</b>	25 U	25 U	25 U	25 U 10 U	25 UJ 10 U	25 U 10 U
Dibenzoturan	10 10	10 U 10 U	16 U 10 U	10 U 10 U	10 U	10 U	10 U
2.4-Oinstrotatuene	10	10 U	10 U	10 U	10 U	10 U	10 U
Diethylphthalate 4-Chlorophenyl-phenylether	10	10 U	10 U	10 U	10 U	10 U	10 Ü
Fluorene	10	10 U	10 U	10 U	10 U	10 U	10 U
4-Nitroaniline	25	25 U	25 U	25 U	25 U	25 U	25 UJ
4,6-Dimtro-2-methylphenol	25	25 U	25 U	25 U	25 U 10 U	25 년 10 년	25 U 10 U
N-Nitrosodiphenylamine(1)	10	10 U 10 U	10 U	10 U 10 U	10 U	10 U	10 U
4-Bromophenyl-phenylether	10	10 U	10 U	10 U	10 U	10 U	10 U
Mexachicropenzene Pentachicrophenoi	10 25	25 U.	25 U	25 U	25 U	25 U	25 U
Phenanitirene	10	10 U	10 U	10 U	10 U	10 U	10 U
Anthracene	10	10 U	10 U	to U	10 U	10 U	10 U
Carbazoie	10	10 W	10 W	10 W	10 W	10 UJ	10 UJ
Di-n-butylphthalate	10	10 U	10 U	10 U	10 U 10 U	10 U 10 U	10 U 10 U
Fluoranthene	10	10 U 10 UJ	10 U 10 U	10 U 10 U	10 U	to U	10 U
Pyrene	10 10	10 0	10 U	10 U	10 U	10 U	10 U
Butytbenzylphthelate 3,3'-Dichtoropenzidine	10	10 03	10 U	10 U	10 U	10 UJ	10 UJ
Berzo(a)anthracene	10	10 U	10 U	10 U	10 U	10 U	10 U
Chrysene	10	10 U	10 U	10 U	10 U	10 U	10 U
Bis(2-ethylhexyl)phthalate	10	10 U	10 U	10 U	10 U	10 U	10 U
Di-n-octylphthalate	10	10 111	10 U	10 U 10 U	10 U	10 U 10 U	10 U 10 U
Benzo(b)fluoranthene	10 10	10 U 10 U	10 U 10 U	10 U	10 U	10 U	10 U
Benzo(k)fluoranthene	10	10 U	10 U	10 U	10 U	10 U	10 U
Benzo(a)pyrene indeno(1,2,3-cd)pyrene	10	10 U	10 U	10 U	10 U	10 U	10 U
Dibenz(a,h)anthracene	10	10 U	10 U	10 U	10 U	10 U	10 U
Benzo(g,h,i)perylene	10	10 U	10 U	10 U	10 U	10 U	10 U
				4.5	4 #	1,0	1.0
	JTRON FACTOR:	1.0 11/25/97	1.0 <b>11/25/9</b> 7	1.0 11/24/97	1.0 11/24/97	11/24/97	11/25/97
	NATE SAMPLED: TE EXTRACTED:	12/18/97	11/28/97	11/25/97	11/28/97	11/28/97	12/01/97
	ATE ANALYZED:	12/19/97	12/18/97	12/18/97	12/18/97	12/16/97	12/12/97
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TABLE 2 SEMIVOLATILE WATER ANALYSIS µg/L

 $(x,y) \in \mathbb{R}^n$  , we consider the confidence of  $(x,y) \in \mathbb{R}^n$  .

SITE: WEST BURKE AUTO BODY CASE: 25874 SDG: ANL40 LABORATORY: COMPUCHEM ENV. CORP.

si	SAMPLE NUMBER: AMPLE LOCATION: PATORY NUMBER:	ANE.55 5W-03 678127	ANIL56 SW-04 876128	ANL57 SW-05 678129	ANL58 SW-08 876130
COMPOUND	CRQ	L			
Phenoi bis(2-Chiorcethyl) ether 2-Chtorophenoi	10 10 10	10 U 10 U 10 U		10 U 10 U 10 U	10 U 10 U 10 U
1,3-Dichloropenzane 1,4-Dichloropenzane 1,2-Dichloropenzane 2-Methylphenol	10 10 10 10	10 U 10 U 10 U 10 U	10 U	10 U 10 U 10 U 10 U	10 U 10 U 10 U 10 U
2.2-Oxybis(1-chloroproper 4-Methylphenol N-Nitroso-di-n-oropylement Hexachioroethane	10	10 U 10 U 10 U 10 U	10 U 10 U	10 U 10 U 10 U 10 U	10 U 10 U 10 U 10 U
Nitropenzene Isophorone 2-Nitrophenoi 2.4-Dimethylphenol	10 10 10 10	10 U 10 U 10 U 10 U	10 U	10 U 10 U 10 U 16 U	10 U 10 U 10 U 10 U
bis(2-Chloroethoxy)methal 2.4-Dichlorophenol 1.2.4-Trichloropenzene	- 12	10 U 10 U 10 U 10 U	10 U 10 U 10 U	10 U 10 U 10 U 10 U	10 U 15 U 10 U 10 U
Naphthalene 4-Chloroanline Hexachlorobutatiene 4-Chloro-3-metrytonenol	10 10 19	10 U 10 U	1 10 U 1 10 U 1 10 U	10 U 10 U 10 U	10 UJ 10 U 10 U
2-Methylnaphthalene Hexachlorocyclopentactien 2,4 6-Trichlorophenol 2,4,5-Trichlorophenol	10 10 10 10	10 to 10 to 10 to 25 to	10 U 1 10 U 1 25 U	10 U 10 U 10 U 26 U	10 U 10 U 10 U 25 U
2-Chioronaphtraiene 2-Nitroaniline Dimethylphthalate Acenaphthylene	10 25 10 10	25 L 10 t	25 U 10 U	10 U 26 U 10 U 10 U	10 U 25 U 10 U 10 U
2.5-Jinitrotoiuene 3-Nitroaniline Acenaphthene	10 25 10 25	25 l 10 l	JJ 25 UJ	10 U	10 U 25 UJ 10 U 25 UJ
2,4-Dinitrophenol 4-Nitrophenol Dibenzofuran 2,4-Dinitrotoluene	25 10 10	25 t 10 t 10 t	ม 25 UJ J 10 บ J 10 U	10 U 10 U 10 U	25 UJ 10 U 10 U
Diethylonthalate  -Chloropnenyl-phenyleth Fluorene  -Nitroaniline	10 25	10 ( 10 ( 25 (	ป 10 บ บ 10 บ ป 25 ย	10 U 10 U 10 U 26 U	10 U 10 U 10 U 25 U
4.6-Dinitro-2-metryrpheno N-Nitrosodionenyiamine(1 4-Bromophenyi-phenyieth Hexachioropenzene	) 10	) 10 t	U 10 U	26 U 10 U 10 U 10 U	25 U 10 U 10 U 10 U
Pantachiorophenol Phenanthrene Anthracene Carbazole	25 10 10 10	10 10	U 10 U	10 U 10 U	25 U 10 U 10 U 10 UJ
Oibutylichthalate Fluoranthene Pyrene Butylbenzylichthalate	16 11 11 12	10 10 10 10 10 10 10 10 10 10 10 10 10 1	ปี 10 บ ป 10 บ	10 U 10 U	19 U 10 U 10 U 10 U
3.3-Dichlorobenzidine Benzokaranthracene Chrysene	11 11 11	10 2 10 0 10	u 10 u u 10 u u 10 u	J 10 UJ 10 U 10 U	10 UJ 10 U 10 U
Bis(2-ettyinexyi)prittalati Di-n-octyiprittalate Benzorbifiuoranthene Benzo(k)fluoranthene Benzo(a)pyrene	9 10 14 11 11 11	10 10 10 10 10	U 10 U U 10 U U 10 U U 10 U	10 U 10 U 10 U 10 U	10 U 10 U 10 U 10 U 10 U
Indeno(1,2,3-cd)pyrene Dibenz(a,h)antmacene Benzo(g,h,i)perylene	1. 1	0 10	บ 10 บ บ 10 บ	10 U	10 U 10 U
	DILUTION FACTOR: DATE SAMPLED: DATE EXTRACTED: DATE ANALYZED:	1.0 11/25/97 11/28/97 12/18/97	1.0 11/25/97 11/26/97 12/18/97	11/25/97 11/25/97 11/28/97 12/18/97	11/25/97 11/25/97 11/26/97 12/16/97

SITE: WEST BURKE AUTO BODY CASE: 25874 SDG: ANL46

TABLE 3
PESTICIDE/POLYCHLORINATED BIPHENYL AQUEOUS ANALYSIS

#UJ/L

LABORATORY: COMPUCHEM ENV. CORP.

SAMPLE NUME SAMPLE LOCAT LABORATORY NUME	ION:	ANL46 DW-01 876112	ANL47 DW-02 876117	ANL48 DW-03 876118	ANL50 RB-02 876119	ANL53 SW-01 876125	ANL54 SW-02 876126
COMPOUND	CRQL						
		0.049.11	0.048 U	0.050 U	0.051 U	0.048 U	0.049 U
alpha-BHC	0.050	0.048 U	0.048 U	0.050 U	0.051 U	0.048 U	0.049 U
beta-BHC	0.050	0.048 U	0.048 U	0.050 U	0.051 U	0.048 U	0.049 U
della-BHC	0.050	0.048 U	0.048 U	0.050 U	0.0027 J	0.048 U	0.049 U
gamma-9HC (Lindane)	0.050	0.048 U	0.048 U	0.050 U	0.051 U	0.04B U	0.049 U
Heptachlor	0.050	0.048 U		0.050 U	0.051 U	0.048 U	0.049 U
Aldrin	0.050	0.048 U	0.048 U	0.050 U	0.051 U	0.048 U	0.049 U
Heptachlor Epoxide	0.050	0.048 U	0.048 U	0.050 U	0.051 U	0.048 U	0.049 U
Endosulfan I	0.050	0.048 U	0.04 <b>8</b> ป 0.097 ป	0.10 U	0.10 U	0.096 U	0.098 U
Dieldrin	0.10	0.096 U	0.097 U	0.10 U	0.10 U	0.0071 J	0.098 U
4,4-DDE	0.10	0.098 U	0.097 U	0 10 U	0.10 U	0.096 U	0.096 U
Endrin	0.10	0.096 U 0.096 U	0.097 U	0 10 U	0.10 U	0.011 J	0 098 U
Endosulfan II	0.10	0.096 U	0.097 U	0.10 U	0 10 U	0.0 <b>96</b> U	0.098 U
4,4'-DDD	0.10	0.096 U	0.097 U	0 10 U	0 10 U	0.011 J	0 096 U
Endosulfan Sulfate	0.10	0.096 U	0.097 U	0 10 U	0.10 U	0.096 U	0 098 U
4,4'-ODT	0.10	0.48 U	0.48 U	0 50 U	0.51 U	0.48 U	0 49 U
Methoxychlor	0 50	0.46 U	0.40 G	0.10 U	0.10 U	0.008 U	0.098 U
Endrin Kelone	0.10	0 090 U	0 097 U	0 10 U	0.10 U	0.098 U	0.098 U
Endrin Aldehyde	0.10 0.050	0.048 U	0.048 U	0 050 U	0 050 U	0.0052 J	0.049 U
alpha-Chlordana	0.050	0.048 U	0 048 U	0.050 U	0.050 U	0.0037 J	0.049 U
gamma-Chìordane	5.0	4.8 D	4.8 U	5.0 U	5.0 U	4.8 U	4.9 U
Toxaphene	1.0	1.0 U	0.97 U	1.0 U	1.0 U	0.96 U	0.98 U
Arocior-1016	2.0	1.9 Ü	1.9 U	2.0 U	2.0 U	1.9 U	2.0 U
Aroclor-1221	1.0	0.96 U	0.97 U	1.0 U	1.0 U	0.96 U	0.98 U
Aroclor-1232	1.0	0.96 U	0.97 U	1.0 U	1.0 U	0.96 U	0.98 U
Aroclor-1242	1.0	0.96 U	0.97 U	1.0 U	1.0 U	0.96 U	0.98 U
Aroclor-1248	1.0 1.0	0.96 U	0.97 U	1.0 U	1.0 U	0.96 U	0.98 U
Aroctor-1254	1.0 1.0	0.96 U	0.97 U	1.0 U	1.0 U	0.96 U	0.98 U
Aroclor-1260	1.0	0.50 0	0.01 0	•••			
		1.0	1.0	1.0	1.0	1.0	1.0
DILUTION FAC		11/25/97	11/25/97	11/24/97	11/24/97	11/24/97	11/25/97
DATE SAME		11/28/97	11/28/97	11/28/97	11/28/97	11/28/ <del>9</del> 7	11/28/97
DATE EXTRAC		12/05/97	12/06/97	12/06/97	12/05/97	12/05/97	12/05/97
DATE ANALY	(ZED:	12/03/8/	(LIONIGI	12,00,01			

SITE: WEST BURKE AUTO BODY CASE: 25874 SDG: ANL46

LABORATORY: COMPUCHEM ENV. CORP.

# TABLE 3 PESTICIDE/POLYCHLORINATED BIPHENYL AQUEOUS ANALYSIS Pg/L

SAMPLE NUMBER	<b>!•</b>	ANL55	ANL56	ANL57	ANL58
SAMPLE LOCATION		SW-03	SW-04	SW-05	SW-06
LABORATORY NUMBER		876127	876128	876129	876130
COMPOUND	CRQL				
	0.050	0.048 U	0.050 U	0.050 U	0.050 U
alpha-BHC	0.050	0.048 U	0 050 U	0.050 U	0.050 U
beta-BHC	0.050	0.048 U	0.050 U	0 050 U	0.050 U
delta-BHC	0.050	0.048 U	0.050 U	0.050 U	0.050 ป
gamma-BHC (Lindane)	0.050	0.048 U	0.050 U	0 050 U	0.050 U
Heptachlor	0.050	0.04B U	0.050 U	0.050 U	0.050 U
Aldrin	0.050	0.048 U	0.050 U	0.050 U	0.050 U
Heptachlor Epoxide	0.050	0.048 U	0.050 U	0.060 U	0.050 U
Endosulfan i	0.10	0.096 U	0.10 U	0.10 U	0.10 U
Dieldrin	0.10 0.10	0.096 U	0.10 U	0.0093 J	0.10 U
4,4'-DDE		0.096 U	0.10 U	0.10 U	0.10 U
Endrin	0.10	0.096 U	0.10 U	0.10 U	0.10 U
Endosulfan il	0.10	0.096 U	0.10 U	0.10 U	0.10 U
4,4'-DDD	0.10	0.096 U	0.0082 J	Q.10 U	0.025 J
Endosulfan Sulfate	0.10	0.096 U	0.10 U	0.10 U	0.10 U
4,4'-DDT	0.10	0.48 U	0.50 U	0.50 U	0.50 U
Malhoxychlor	0.50	0.48 U	0.10 U	0.10 U	0.10 U
Endrin Ketone	0.10	U 089 A	0.10 U	0.10 LJ	Q.10 U
Endrin Aldehyde	0.10 0.050	0.0480 U	0.050 U	0.050 U	0.050 U
alpha-Chlordane	0.050	0.0480 U	0.050 U	0.050 U	0.050 U
gamma-Chlordane	5.0	4 8 U	5 N U	5 0 U	5.0 U
Toxaphene	1.0	0.96 U	1.0 U	10 (1	1.0 U
Araclor-1016	2.0	1.9 Ü	2.0 U	2.0 U	2.0 U
Aroclor-1221	1.0	0.96 U	1.0 ป	1.0 U	1.0 U
Aroclor-1232	1.0	0.96 U	1.0 U	1.0 U	1.0 U
Aroctor-1242		0.96 U	1.0 U	1.0 U	1.0 U
Arocker-1248	1.0	0.96 U	1.0 U	1.0 U	1,0 U
Aroclor-1254	1.0		1.0 U	1.0 U	1.0 U
Arodor-1260	1.0	0.96 U	1.0 G	<b>.</b>	
DILUTION FACTO	D.	1.0	1.0	1.0	1.0
		11/25/97	11/25/97	11/25/97	11/25/97
DATE SAMPLE		11/28/97	11/28/97	11/28/97	11/26/97
DATE EXTRACTE		12/05/97	12/06/97	12/05/97	12/06/97
DATE ANALYZE	D:	(Zmara)	12/00/01	· · · · · · · · · · · · · · · · · · ·	

SITE: WEST BURKE AUTO BODY CASE: 25174 SDG: MAKZ29 LABORATORY: SENTINEL, INC.

#### TABLE 1 INORGANIC WATER ANALYSIS µg/L

			MAKZ31	MAKZ33	MAKZ34	MAKZ35	MAKZ36
SAMPLE NUMBER:	MAKZ29	MAKZ30		****		SW-02	SW-03
SAMPLE LOCATION:	DW-01	DW-02	DW-03	₽В-02	SW-01		
	08735S	08736S	08737S	08738S	087398	08740S	08741S
LABORATORY NUMBÉR:	001440	,					

	•••	ISTRUMENT DETECTION LIMITS								CONTRACT DETECTION LIMITS (up/L)
INORGANIC ELEMENTS	 Р	<u>(µg/L)</u> 11.4	42.3 J	36.5 J	55.1 J	47.2 J	188 J	11.4 UJ	287	200
ALUMINUM	г В	4.8	4.8 U	4.8 U	4.8 U	4.B U	4.B U	- 4.8 U	4.8 U	60
ANTIMONY	Б	4.1	4.1 UJ	5.4 J	10					
ARSENIC	г В	0.60	15.1	15.1	3.0 U	10.5	12.0	14.7	13.0	200
1 BARIUM	<u> </u>	0.10	0.10 U	0.1D U	9					
BERYLLIUM	<u> </u>	0.30	0.30 U	0.37 J	1.6	1.8	0.53 J	0.30 J	0.73	5
CADMIUM	P .	4.B	71600	70800	60700	1020	71000	79500	60200	5000
CALCIUM	ŗ	0.70	0.70 U	0.70 U	1.7	1.5	1.1 J	0.70 U	0.71 J	10
CHROMIUM	P .	1.1	1.1 U	1.1 Ų	50					
COBALT	<u> </u>	1.1	28.8 J	32.0 J	343 J	953 J	+213 J	8.6 U	► 242 J	25
COPPER		11.8	27.4 U	35.3 U	312 J	57.2 U	357 J	60.2 U	431 J	100
IRON	2	11.8	1.8 UJ	1.B U.j	15.2 J	12.2 J	10.3 J	4.0 J	3.7 3	3
LEAD	F .	7.5	4040	3970	3330	214 U	2910	3730	2350	6000
MAGNESIUM	F .	0.4	1.7 U	1.9 U	76.5 J	11.9 J	109 J	43.8 J	63.1 J	15 0.2
MANGANESE	Ćν	0.10	0.10 UJ	0.10 (1)	0.10 UJ	u.∠ 40				
MERCURY	0	1.3	1.3 U	1.3 U	2.6 J	2.4 J	1.4 J	1.3 U	1.3 U	
NICKEL		14.2	7160	6900	2280	148	3680	4790	3240	5000
(I'OTASSIUM	b	2.3	R	R	R	R	R	R	R	5 10
SELENIUM	6	0.80	D.BO U	0.80 U	0.80 U	0.80 U	0.80 U	0.60 U	1.4 J	• • •
SILVER	- E	93.1	45400	44500	11700	305 U	29600	40400	33320	5000
SODIUM		2.9	5.9 U	3,1 U	3.1 U	3.6 U	2.9 U	2.9 U	4.3 U	10
THALLIUM	n	1.4	1.4 U	1.4 U	50					
VANADIUM	r	1.4 0.80	9.9 J	21.6 J	59.6 J	94.0 J	37.6 J	6.6 J	23.1 J	20
ZING CYANIDE	CA	0.36	1.5 U	2.7 U	0.36 U	1,1 ម	0.36 U	<u>. 1.5 U .</u>	1.4 U	10

ANALYTICAL METHOD

P - ICP

CV + COLD VAPOR

CA - MID DISTILLATION

SPECTROPHOTOMETRIC

NOTE:

- J- QUANTITATION IS ESTIMATED DUE TO LIMITATIONS IDENTIFIED
  - IN THE QUALITY CONTROL REVIEW (DATA REVIEW).
- -- VALUE IS NON-DETECTED
- U VALUE IS NON-DETECTED AND DETECTION HIMIT IS RAISED.
- UJ VALUE IS NON-DETECTED AND DETECTION LIMIT IS ESTIMATED.
- R VALUE IS REJECTED.

SITE: WEST BURKE AUTO BODY CASE: 25874 SDG: MAKZ29 LABORATORY: SENTINEL, INC.

#### TABLE 1 INORGANIC WATER ANALYSIS Hg/L

SAMPLE NUMBER: SAMPLE LOCATION: LABORATORY NUMBER: MAKZ37 SW-04 08742S MAKZ38 SW-05 08743S MAKZ39 SW-06 08744S

ORGANIC ELEMENTS		STRUMENT DETECTION LIMITS (HUL)				CONTRACT DETECTION LIMITS (UOTL)
Oldanio Errinanta			ED 1 1	12800	42.8 J	200
.UMINUM	P	11.4	56.4 J	48 U	4.8 U	60
TIMONY	P	4.B	4.8 U	5.4 J	4.1 UJ	10
SENIC	₽	4.1	4.1 UJ	74.B	13.1	200
RIUM	P	0.60	16.1	0.56 U	0.10 U	5
RYLLIUM	P	0.10	0.10 U	1.7	0.30 U	Б.
DMIUM	P	0.30	1.2	68800	70700	5000
LCIUM	P	4.8	79800	25.2	0.70 U	10
IROMIUM	P	0.70	1.0 J	7.0 J	1.1 U	50
BALT	P	1.1	1.1 U		218 J	25
OPPER	P	1.1	486 J	29.5 J	60.6 U	100
ON	P	11.8	79.4 U	21200 J	7.9 J	3
AD	P	1.8	21.0 J	47.9 J		500Q
GNESIUM	P	7.5	3490	5620	3090	15
ANGANESE	P	0.4	11.9 J	2500 J	35.9 J	0.2
ERCURY	CV	0.10	0.10 UJ	0.15 J	0.10 UJ	40
CKEL	P	1.3	2.1 J	27.2	1.3 U	5000
TASSIUM	P	14.2	4530	6910	3650	5
ELENIUM	P	2.3	R	R	R	10
LVER	P	0.80	U 08.0	1.3 J	0.80 U	5000
DDIUM DDIUM	P	93.1	22300	31100	19500	10
	ė	2.9	3.0 U	2.9 U	4.4 U	50
IALLIUM	, P	1.4	1.4 U	20 (	1.4 Ų	20
NADIUM	þ	0.80	76.6 J	109 J	45.6 J	10
NG YANIDE	CA	0.36	1.5 U	3.2 U	1.4 U	

ANALYTICAL METHOD

P - 1CP

CV - COLD VAPOR

CA - MID DISTILLATION

SPECTROPHOTOMETRIC

NOTE:

J- QUANTITATION IS ESTIMATED DUE TO LIMITATIONS IDENTIFIED

IN THE QUALITY CONTROL REVIEW (DATA REVIEW).

-- VALUE IS NON-DETECTED

U - VALUE IS NON-DETECTED AND DETECTION LIMIT IS RAISED

UJ VALUE IS NON-DETECTED AND DETECTION LIMIT IS ESTIMATED.

R - VALUE IS REJECTED.

## ATTACHMENT C

## WEST BURKE AUTO BODY

## SEDIMENT SAMPLES START

Samples Collected 24 and 25 November 1997

## TABLE 1 VOLATILE SOIL ANALYSIS - LOW LEVEL HB/kg

SITE: WEST BURKE AUTO BODY CASE: 0103F SDG: DAFC37 LABORATORY: CEIMIC CORPORATION

SAMPLE NUMBER: SAMPLE LOCATION: LABORATORY NUMBER:		DAFC37 SD-01 971090-01	DAFC36 S()-02 971090-02	DAFC39 SD 03 971090-03	DAFH10 SD-04 871090-04	DAFH11 SD-05 971090-05
COMPOUND	CRQL			•		
Chioromethane	10	28 U	14 U			2900 U 2900 UJ
Bromomelhane	10	28 U	14 U			2900 U
Vinyi Chloride	10	28 U	14 U			2900 U
Chlorpelhane	10	28 UJ	14 U			380 J TB
Methylene Chloride	10	28 U	14 U		• •	11000 JEB
Acelone	10	38D J E		•		2900 U
Carbon Disulide	10	28 U	14 U		-	2900 U
1.1-Dichloraethene	10	28 U	14 U			2900 U
1.1-Dichloroethene	10	28 U	14 U			2900 U
1,2-Dichloraethene (Total)	10	28 U	14 U		•	2900 U
Chloroform	10	28 U	14 6		_	2900 U
1,2-Dichlorpethane	10	28 U	1 <u>4</u> L		•	2800 UJ
2-Butanone	10	28 UJ			-	2900 U
1.1.1-Trichioroethane	10	28 U	14 L			2900 U
Carbon Tetrachloride	10	59 ft]		, , , , , , , , , , , , , , , , , , , ,	•	2900 U
Bromodichloromethane	10	28 U	14 L			2900 U
1,2-Dichloropropane	10	28 U	14 U	-	-	2900 U
cls-1,3-Dichloropropene	10	28 U	14 L		-	2900 U
Trichloroeihene	10	2â U	14 L	,	_	2900 U
Dibromachioromethane	10	28 U	14 L 14 L	,	-	2800 U
1,1,2-Trichloroethune	10	28 U	14 (			2900 U
Benzene	10	28 U	14 (			2900 U
trans-1,3-Dichloropropene	10	28 U	14 1	,		2900 U
Bromoform	10 10	28 UJ		•		2900 LiJ
4-Methyl-2-pentanone	1D	26 UJ			) 14 ሁ	2900 UJ
2-Hexanone	10	28 U	14 1		J 14 U	2980 U
Tetrachioroethone	10	28 U	14 L		J 14 U	3800 D
1,1,2,2-Tetrachlorgethane	10	28 U	14 L			2900 U
Toluene	10	28 U	14 (	•		2800 U
Chlorobanzana	10	28 U	14 (			2900 U
Ethylbenzene	10	28 U	14 1			2900 U
Slyrene	10	28 U	14 1	_		2900 U
Xylene (total)	10	24 0	14 .	, , , ,	_	
DILUTION FACTOR:		1.0	1.0	1.0	1.0	100
DATE SAMPLED:		11/24/97	11/24/97	11/24/97	11/24/07	1 <i>1/24/97</i> 1 <i>2/07/97</i>
DATE ANALYZED:		12/04/97	12/03/97	12/03/97	12/03/97	12/07/91

NOTE: RESULTS ARE REPORTED ON A DRY WEIGHT BASIS.

SITE: WEST BURKE AUTO BODY

#### TABLE 2 VOLATILE AQUEOUS ANALYSIS μg/L

CASE: 0103F SDG: DAFC37 LABORATORY: CEIMIC CORPORATION

SAMPLE NUMBER: SAMPLE LOCATION: LABORATORY NUMBER:		DAFH16 TB-01 971090-08	DAFH17 RB-01 971090-07
COMPOUND	CROL		
Chloromethane	10	10 U	10 U
Bromomethane	10	10 U	10 U
Vinyl Chloride	10	10 U	10 U 10 U
Chloroethane	10	10 U	10 U
Methylene Chloride	10	1 J	2 J
Acetone	10	10 U	10 U
Carbon Disulfide	10	10 U	10 U
1,1-Dichtorouthene	10	10 U	10 U
1,1-Dichiproethene	10	10 U	10 U
1,2-Dichloroethene (Total)	10	10 U 10 U	10 U
Chloroform	10	10 U	10 U
1,2-Dichloroethane	10	10 U	10 U
2-Butanone	10	10 U	10 U
1,1,1-Trichloroethane	10	10 U	10 U
Carbon Tetrachloride	10	10 U	10 U
Bromodichloromethane	10		10 U
1,2-Dichleropropens	10	10 U 10 U	10 U
cis-1,3-Dichloropropene	10	10 U	10 U
Trichloroathene	10	10 U	10 U
Dibromochloromethane	10	10 U	10 U
1,1,2-Trichloroethane	10	10 U	10 U
Benzene	10	19 U	io U
trans-1.3-Dichloropropena	10	10 U	10 U
Bromoform	10 10	10 U	10 U
4-Mathyl-2-pentarione	10 10	10 U	10 U
2-Hexanona	10	10 U	10 U
Tetrachloroethene	10	10 U	10 U
1,1,2,2-Tetrachioroethane	10	10 U	10 U
Toluene	10	10 U	12
Chiorobenzene .	10	1D U	10 U
Ethylbenzana	10	10 U	10 U
Styrene	10	10 U	1 3
Xylene (total)		, 72 =	
DILUTION FACTOR:		1.0	1.0
DATE SAMPLED:		11/24/97	11/24/97
DATE ANALYZED:		12/03/97	12/03/97

SITE: WEST BURKE AUTO BODY CASE: 0103F SDG: DAFCS7 LABORATORY: CEIMIC CORPORATION

## TABLE 3 SEMIVOLATILE SOIL ANALYSIS

SAMPLE NUMBER: SAMPLE LOCATION: LABORATORY NUMBER:		DAFC37 SD-01 971080-01	DAFC36 30-02 971090-02	9AFC38 50-03 971088-03	DAFH10 50-04 971080-04	DAFH11 SD-05 971090-05
COMPOUND	CROL					
Phenoi	330	1 <b>100</b> U	740 U	2200 U	480 U	1000 U
bis(2-Chloroethyl) ether	330	1100 U	740 U	2200 U	460 U	1000 U
2-Chlorophanol	330	1100 U	740 U 740 U	2200 U 2290 U	480 U 480 U	1000 U 1000 U
1,3-Olchiorobenzene	336	1100 U 1100 U	740 U	2200 U	460 U	1000 U
1,4-Dichloropenzane	330 330	1100 U	740 13	2300 U	460 U	1000 U
1,2-Dichloropersone 2-Mathylphanol	330	1190 U	746 U	2200 U	460 Ų	1000 U
2.2-Oxybis(1-chlorograpmid)	330	ענו ממרך	740 UJ	2200 UJ	440 UJ	1000 UJ
4-Methylphenol	330	1100 U	740 U	2200 U	460 U	1000 U 1000 U
N-Nitroso-di-n-propytamine	230	1100 U	740 U 740 U	22500 U 22503 U	480 U 480 U	1000 U
Hexachioroethane	330 330	1100 U 1100 U	740 U	2200 U	440 U	1000 U
Nitrobert2600	330	1100 U	740 U	2200 U	460 U	1000 LI
isophorone	330	1100 U	740 U	2200 U	480 U	1000 U
2-Nitrophenol 2.4-Dimethyrphenol	330	1100 U	740 U	2300 U	460 U	1000 U
bia(2-Chioroethoxy)methane	330	1100 U	740 U	23200 U	460 U	1000 U
2.4-Dichlorophenol	330	11 <b>00</b> U	740 U	2200 U	480 U 480 U	1000 U 1000 J
1,2,4-Trichlorobenzene	220	1100 U	740 U 740 U	2200 U 2200 U	480 U	1000 U
Naprthalene	330	1100 U	740 U	2250 U	480 U	1000 U
4-Chioroanilne	330 330	1100 U	740 U	2200 U	460 U	1000 U
Hexactionobutadiene	330	1100 U	740 U	220C U	460 U	1000 d
4-Chioro-3-methylphenol 2-Methylnaprithalene	330	1100 U	740 U	2200 U	460 U	1000 U
Hexachlorocyclopentadiene	330	1100 U	740 U	<b>2200</b> UJ	460 UJ	1000 👊
2,4,5-Trichiorgonenoi	220	1100 U	740 U	2200 U	480 U	1000 J 2500 J
2,4,5-Trichlorophenol	830	2700 U	1900 U	<b>5500</b> 년 <b>2200</b> 년	1100 U 460 U	1000 J
Z-Chloromaphthalene	330	1100 U 2700 U	740 U 1900 U	2200 U	1100 U	2500 J
Z-Nitroaniinė	630 330	1100 U	740 U	7250 U	460 U	1000 H
Denetryphthalate	330	1100 U	740 U	2200 U	460 U	1 <b>000</b> J
Acensontrytens 2,6-Cintrotoluens	330	1100 U	740 U	2200 J	460 U	1 <b>000</b> U
3-Nitroan: ne	630	2700 UJ	1900 W			2500 U.1
Acensphinene	330	1100 U	740 UJ		460 년 1100 년	1000 U 2500 J
2.4-Ointrapnenoi	630	2700 ∪J 2700 UJ	1900 W 1900 W		1100 U	2500 U
4-Nitropnenal	230 330	1100 U	740 U	2260 U	450 U	1000 U
Cibenzoturan 2.4-Cuntrotoluene	330	1100 U	740 U	2200 U	460 U	1000 U
Diethylonthalase	330	1100 U	740 U	<b>2200</b> U	460 U	1000 U
4-Chloropneny-phenylether	330	1100 U	740 U	2200 U	460 U	1990 ∪ 1990 ∪
Fluorens	220	1100 U	740 U	2200 U	460 U 1100 U	2500 U
4-Nitroantine	#20	2700 U	1900 U 1900 U	9500 U 9500 U	1100 U	2500 U
4,5-Dinitro-2-methylphenol	1200 2200	2700 U 1100 U	740 U	2200 U	460 U	1000 U
N-Nitrosociphenylemine(1)	330	1100 U	740 U	2200 U	480 U	1000 U
4-Bromophenyi-ohenyiether Hezachloropenzene	330	1100 U	740 U	22200 U	460 U	1000 U
Pertachiorophenol	830	27 <b>00</b> UJ			·	2500 UJ
Phenanthrene	330	1700 U	740 U			1000 년 1000 년
Ambracene	330	1105 U	740 U			1000 U
Carbazole	330	1100 UJ 1100 U	) 740 U. 740 U		+	1000 U
Di-n-butyiphthauste	330 330	150 J	89 3	2200 U		1000 U
Fluoranthene Pyrane	330	1100 U	740 U			1000 U
Butylbenzylprithaliste	330	1100 U	740 U	2290 U		1000 U
3,3-Dichtorobenzidine	330	1100 U.		-		
Genzo(s)amhracene	230	1100 U				1000 ป 1000 ป
Chrysene	330	1100 U	740 U 980 J			110 J
Bie(2-ethylhexyl)phthalate	330 330	120 J 1100 U				
Di-n-octytphtnatms	330-	1100 U			-	1000 U
Benzo(b)fluoranthene Benzo(k)fluoranthene	330	1100 U			J 460 U	1000 U
Benzol kjiroorenistere Benzol alpyrene	330	1100 U	740 U			1000 U
Indeno(1,2,3-cd)pyrane	330	1100 U				1000 U
Dibenz(a,h)anthracene	330	1100 U				1000 U 1005 U
Benzo(g,h.i)perylene	330	1100 U	1 740 t	2200		
DILUTION FACTO DATE SAMPLE OATE EXTRACTE OATE ANALYZE % MOISTUR	D: D: Q:	1.0 11/24/97 12/07/97 12/30/97 70	1.0 11/24/97 12/07/97 12/30/97 56	5.0 11/24/87 12/07/97 12/28/87 27	1.0 12/24/97 12/07/97 12/28/97 29	1.0 12/24/97 12/07/97 12/28/97 57

NOTE: RESULTS ARE REPORTED ON A DRY WEIGHT BASIS.

# SITE: WEST BURKE AUTO BODY CASE: 0103F SDG: DAPC37 LABORATORY: CEMIC CORPORATION

## TABLE 4 SEMIVOLATILE WATER AHALYSIS

SAMPLE	E NUMBER: LOCATION: LY NUMBER:	QAFH17 RB-01 671090-07
COMPOUND	CROL	
Phenoi	19	10 U
bie(2-Chioroethyi) ether	10	10 U 10 U
2-Chlorophenol 1,3-Dichloropenzene	10 10	10 U
1,4-Dichlorobenzene	10	10 U
1,2-Dichloropenzene	10	10 U 10 U
2-Methylphenol	10 10	10 U
2_Z-Qxyse(1-chloropropen 4-Methylonenol	10	10 U
N-Nigroso-di-n-propytemene	10	10 U
Manachioroethane	10 10	10 U
Nitrobenzene Isopnorone	10	10 U
2-Nitropnenoi	10	10 U
2,4-Dimethylphenol	10 - 10	10 U
bin(2-Chigroethoxy)methan 2.4-Bichlorognenal	e 10 10	10 U
1.2.4-Trichloropenzene	10	10 U
Neprosiene	10	10 U
4-Chioroantine	10 10	10 U 10 U
Hexactions published 4-Chicro-3-methysphenol	10	10 U
2-Methylnaphthalene	10	10 U
Hexachlorocyclopentadien	• 10 10	10 U
2,4,6-∓nentoropnenoi 2,4,5-∓nentoropnenoi	10 25	25 U
2-Спосопасниваем	10	10 U
2-Nicosniine	25	25 U 10 U
Oimetry ontheiste Acenson crylene	10 10	10 0
2.6-Dinitrotoluene	10	10 U
3-Nitroaniine	25	25 U 10 U
Acenapathene	10 25	75 U
2,4-Cingrophenol 4-Nitrophenol	25	Z\$ UJ
Dibenzofuran	10	10 U
Z.4-Dinitratoluene	10 10	10 년 10 년
Diethylonthalate 4-Chiompnenvi-pnenyleth	:I	10 U
Fluorene	10	10 U
4-Nitroantine	25 . 25	25 U 25 U
4,5-Dinitro-2-methylphens N-Nitrosogiphenylamine(1	•	10 U
4-Bromosnenyi-onenyieth		1 <b>0</b> U
Hexacricropenzene	10	10 U
Pentachioropherol Phenenthrone	25 10	25 U 10 U
Anthracens	10	
Carbazole	10	
Di-n-butyiphthalate Fluoranthene	10 10	
Pyrane	10	1 <b>0</b> U
Butylbenzylphthalate	10	
3,3'-Oichioropenzidine	10 10	
Benzo(s)anthracene Chrysene	10	·
Bis(2-ethylhexyl)phthulat		
Di-n-octylphthalete	10	
Benzo(b)fluoranthene Benzo(k)fluoranthene	10	
Benzo(a)pyrane	10	10 U
Indeno(1.2.3-cd)pyrene	10 10	
Dibenz(a,h)antrirecene Benzo(g,h,i)perylene	10 \$6	
- · · · · · ·		
	ITION FACTOR: ATE SAMPLED:	1.0 11/24/97
	E EXTRACTED:	12/01/97
D	TE ANALYZED:	12/02/97

#### SITE: WEST BURKE AUTO BODY CASE: 0103F SOG: DAFC37 LABORATORY: CEIMIC CORPORATION

#### TABLE 5 PESTICIDE/POLYCHLORINATED BIPHENYL SOIL ANALYSIS µg/kg

DAFH11 DAFH10 DAFC38 DAFC39 DAFC37 SAMPLE NUMBER: SD-05 SD-03 SD-04 SD-D2 SD-01 SAMPLE LOCATION: 971090-05 971090-04 971090-03 971090-02 971090-01 LABORATORY NUMBER: CROL COMPOUND 5.1 U 2.4 U 2.3 U 5.6 U 3.8 U 1.7 aipha-BHC 5.1 U 2.4 U 2.3 U 3.8 U 5.6 U 1.7 bets-BHC 5.1 U 2.3 U 2.4 U 3.8 U 5.6 U 1.7 delta-BHC 5.1 U 2.4 U 2.3 U 3.8 UJ 5.6 U 1.7 gamma-BHC (Lindane) 5.1 U 2.4 U 23 U 5.6 U 38 U 1.7 Heptachlor 5.1 U 2.4 U 23 U 3.8 U 5.6 U 1.7 Aldrin 2.4 U 5.1 U 2.3 U 3.8 U 5.6 U 1.7 Heptachlor Epoxida 5.1 U 2.4 U 2.3 U 3.8 U 5.6 U 1.7 Endosullan I 9.9 U 4.6 U 4.5 U 7.4 U 11 U 3.3 Dieldrin 99 1 4 B U 4.5 U 7.4 U 11 U 3.3 4.4'-DDE 88 U 4.6 U 4.5 U 11 U 7.4 U 3.3 Endrin 9.9 U 4.8 U 4.5 U 7.4 U 11 U 3.3 Endosulfan H 8.9 U 4.6 U 4.5 U 7.4 U 11 U 3.3 4.4"-DDD 9 B U 4.6 U 4.5 U 7.4 U 11 U 3.3 Endosulian Sulfate 9.9 U 4.6 U 4.5 U 7.4 U 11 U 3.3 4.4'-DDT 24 U 51 U 23 U 56 U 38 U 17 Methoxychlor 9.9 U 4.6 U 4.5 U 11 U 7.4 U 3.3 Endrin Ketone 9.9 U 4.6 U 4.5 U 7.4 U 11 U 3.3 Endrin Aldehyde 2.4 U 5.1 U 2.3 U 5.6 U 3.8 U 1.7 aipha-Chlordane 6.1 U 24 U 23 U 3.B U 5.6 U 1.7 gamma-Chlordane 510 U 240 U 230 U 380 U 660 U 170 Toxaphane 99 U 46 U 45 U 74 U 110 U 33 Aroctor-1016 200 U 94 U 91 U 150 U 220 U 67 Arocior-1221 99 U 46 U 45 U 74 U 110 U 33 Aroclor-1232 99 U 46 U 45 U 74 U 33 110 U Aroclor-1242 99 U 46 U 45 U 74 U 110 U 33 Aroclor-1248 99 U 46 U 74 U 45 U 110 U 33 Aroclor-1254 99 U 46 U 45 U 110 U 74 U 33 Aroclar-1260 1.00 1.00 1.00 1.00 1.00 **DILUTION FACTOR:** 11/24/97 11/24/97 11/24/97 11/24/97 11/24/97 DATE SAMPLED: 12/03/97 12/03/97 12/03/97 12/03/97 12/03/97 DATE EXTRACTED: 12/23/97 12/24/97 12/23/97 12/23/97 12/24/97 DATE ANALYZED: 67 29 56 27 70

NOTE: RESULTS ARE REPORTED ON A DRY WEIGHT BASIS

% MOISTURE:

### SITE: WEST BURKE AUTO BODY CASE: 0103F SDG: DAFC37

TABLE 6
ESTICIDE/POLYCHLORINATED BIPHENYL AQUEOUS ANALYSIS

µg/L

LABORATORY: CEIMIC CORPORATION

SAMPLE NUMBER: DAFH17
SAMPLE LOCATION: R8-01
LABORATORY NUMBER: 971090-07

COMPOUND	CRQL	
alpha-BHC	0.050	0.050 U
heta-BHC	0.050	0.050 U
delta-BHC	0.050	0.050 U
gamma-BHC (Lindane)	0.050	0.050 U
	0.050	0.050 U
Heptachlor	0.050	0.050 U
Aldrin	0.050	0.050 U
Heptachlor Epoxide	0.050	0.050 U
Endosulfan I	0.10	0.10 U
Dieidrín_	0.10	0.10 U
4,4'-DDE	0.10	0.10 U
Endrin	0.10	0.10 U
Endosulfan II	0.10	0.10 U
4,4'-DDD	0.10	D.10 U
Endosulfen Sulfate	0.10	0.10 U
4,4'-DDT	0.50	0.50 U
Methoxychlor	0.10	0.10 U
Endrin Katone	0.10	0.10 U
Endrin Aldehyde	0.050	0.050 U
elpha-Civordane	0.050	0.050 U
gamma-Chlordane	5.0	5.0 U
Toxaphene	1.0	1.0 U
Aroctor-1016	2.0	2.0 U
Aroclor-1221	1.0	1.0 U
Arector-1232	1.0	1.0 U
Aroclor-1242	1.0	1.0 U
Araclor-1248	1.0	1.0 U
Aroclor-1254	1.0	1.0 U
Aroclor-1260	1.0	
NULTION FACTOR:		1.00

 DILUTION FACTOR:
 1.00

 DATE SAMPLED:
 11/24/97

 DATE EXTRACTED:
 12/01/97

 DATE ANALYZED:
 12/23/97

SITE: WEST BURKE AUTO BODY CASE: DAS 0103F SDG: DAFC37\_I LABORATORY: CEMHC CORPORATION

#### TABLE 1 INORGANIC SOIL ANALYSES mg/kg

SAMPLE NUMBER: SAMPLE LOCATION: LABORATORY NUMBER: % SOLIDS:			DAFC37 SD-01 971090-01 32.9	DAFC38 SO-02 971090-02 53.5	DAFC39 SD-03 971090-03 70.5	DAFH10 SD-04 971090-04 67.3	DAFH11 SD-05 971090-05 35.6	DAFH12 SD-06 971090-06 36.5	
		INSTRUMENT DETECTION LIMITS		2 · 1 · · · · · · · · · · · · · · · · ·	-· -·				CONTRAC' DETECTION LIMITS (mg/kg)
NORGANIC ELEMENTS		(mg/kg)						13200	40.0
11.4	_	7.00	9290	8140	3160	3210	15100		120
ALUMINUM	P	7.62	1001		0 42 UJ	0.59 UJ		35	20
YNOMITMA	P	0.34	1.9 U	1.1 U	0 79 11	D.93 U	3.8	41.8 U	40 0
ARSENIC	P	0.48	23.4 U	17.B U	11.7 U	11.2 U	45.9 U	41.8 C 0.98	1.0
BARIUM	P	0.6	0.89	0.50	0 25 J	0 44	15	0.24	1.8
BERYLLIUM	P	0.12	0.09 0.24 U	D.13 U	0.10 U	G 12 U	0.21 U	10700	1000
CADMIUM	P	0.06	11800	7380	3250	3560	10700	50.0	20
CALCIUM	P	18.14	22.2	19 8	14.0	13.5	61.9	8.0 U	1D.D
CHROMIUM	P	0.92	7.5 U	5.0 U	1.5 U	1.7 U	9.0 U	=	5.0
COBALT	P.	1.2		11.3	4.1	5.B	17.1	12.9	20.0
COPPER	P	1,16	15.6	9710	7310	9570	17 <del>9</del> 00	16000	0.60
IRON	Р	1.76	14100	15.7 J	14.0 J	16.7 J	13 <b>8 J</b>	12.6 J	1000
LEAD	P	0.32	23.8 J		93B	972	2460	2410	3.0
MAGNESIUM	P	25.38	3200	3160	298	257	851	927	_
	p	0.3	154	199	0.07 U	a.07 U	0.25 J	0.19 J	0.1
MANGANESE	Á۷	D.05	0.12 U	0.0B U		11 4 U	27.5	24.0 U	8.0
MERCURY	P	1.26	26.3 U	19.6	10.5 U	225	363	250	1000
NICKEL	P	34.0	. 481	461	170	0.96 U	1.7 U	1 B U	1.0
POTASSIUM	þ	0.94	2.6 J	1.1 U	0.81 U			ე 3.6 სქ	2.0
SELENIUM	P	0.24	3 O U.					322 U	1000
SILVER	P	16.2	349 U	232 U	131 U	157 U			20
SODIUM	P	0.38	0.89 13	0.50 U	0 37 U	0 72 U.	·	16.2 U	10 0
THALLIUM	P	1.36	173 U	13.0 U	4 9 U	5 2 U	94.8	93 7	40
VANADIUM	•		69.5	49 4	25 1	26.7			2.5
	-		1.5 ป	0.93 U	0.67 U	0.74 U	14 2		
ZINC CYANIDE  ANALYTICAL METHOD F - FURNACE P - ICPIFLAME AA CV - COLD VAPOR AS - SEMI AUTOMATED	P AS	0.7B 0.50		n = A n = A n = a	IN THE QUALIT	Y CONTROURI ETECTED ETECTED AND	DUE TO LIMITA EVIEW (DATA R	TIONS IDENTIFIED	<b>=</b> "

NOTE: RESULTS ARE REPORTED ON A DRY WEIGHT BASIS.

AS - SEMI AUTOMATED

SPECTROPHOTOMETRIC

AV - AUTOMATED COLD VAPOR AA

#### TABLE 2 INORGANIC WATER ANALYSIS μg/L.

CASE: DAS 0103F 8DG: DAFC37\_I LABORATORY: CEIMIC CORPORATION

> SAMPLE NUMBER: SAMPLE LOCATION: LABORATORY NUMBER:

DAFH17 **RB-01** 971090-07

NOTE:

LABORATORY NUMBER:				CONTRA
		· · · · · · · · · · · · · · · · · · ·		DETECTI
		STRUMENT		LIMITS
	1	DETECTION		(hthr)
		LIMITS		
VORGANIC ELEMENTS		(µg/L)		200
TOTAL STREET				60.0
LUMINUM	P	38.1	1.7 UJ	10.0
FILMACION	P	1.7		200
NTIMONY	P	2.4	-	5.0
RSENIC	P	3.0		50
ARIUM	P	0.58	<b></b>	5000
BERYLLIUM	p	0.28		10.0
CADMIUM	P	90.7	415 U	50.0
CALCIUM	P	4.6	UJ	25.0
CHROMIUM	P	6.0	-	100
COBALT	P	5.8	<del>_</del>	3.0
OPPER	P	8.8	33.9 บ	5000
RON ·	ė	1.6	LTJ	15.0
EAD	P	127		0.20
MAGNESIUM	į. P	1.5	1.9 UJ	40.0
MANGANESE	ÄV	0.12		5000
MERCURY	P	6.3	-	5.0
NICKEL	ė	170		10.0
POTASSIUM	Ġ	4.7	_	5000
SELENIUM	P	1.2	<del>-</del>	10.0
SILVER	P	61.0	1120 U	50.0
SODIUM	•	1.9	·	
THALLIUM	P	6.8	-	20.0
VANADIUM	•	3.9	_	100
ZINC	P			
CYANIDE	AS	5.0	<del></del>	

ANALYTICAL METHOD

F - FURNACE

P - ICP/FLAME AA

CV - COLD VAPOR

AS - SEMI AUTOMATED

SPECTROPHOTOMETRIC

AV - AUTOMATED COLD VAPOR AA

J = QUANTITATION IS ESTIMATED DUE TO LIMITATIONS IDENTIFIED

IN THE QUALITY CONTROL REVIEW (DATA REVIEW).

U = VALUE IS NON-DETECTED AND DETECTION LIMIT IS RAISED.

UJ = VALUE IS NON-DETECTED AND DETECTION LIMIT IS ESTIMATED.

-- = VALUE IS NON-DETECTED.